



<p>Composition Requirements: (3-6 Units)</p> <p>ENGL 101/107 – English 1st semester Composition 3 _____</p> <p>ENGL 102/108 – English 2nd semester Composition 3 _____</p> <p>Or ENGL 109H – Advanced First Year Composition 3 _____</p>	<p>Computer Skills Requirements: (4 Units)</p> <p>AREC 297 – Excel Applc. for Econ. Analy (Sp) 1 _____</p> <p>BE 120 or MIS 111 (Sp) Microcomputing Applctns 3 _____</p>
<p>Math requirements: (MATH100 --> MATH 112 & AREC 197c, --> MATH113/116 & AREC 239) (11 Units)</p> <ul style="list-style-type: none"> College Algebra, MATH112 or transfer equivalent course, C or better final grade required. 3 _____ Marginal Analysis for Economists, AREC197c, (F), (pre-req MATH112 placement or completion) 1 _____ Introductory Statistics & Data Analysis, AREC 239,(Sp) 4 _____ Calculus: 1 course from MATH 113 or MATH 116- (pre-req MIS11 or BE120), 122A/B, 125 or 129. 3 _____ 	<p>Economics Requirements: (6 Units)</p> <p>ECON 200 – Basic Economic Issues 3 _____</p> <p>(Transfer crs: ECON201A[micro]/ECON201B[macro])</p> <p>Intermediate Microeconomics:</p> <p>AREC304 (F) Production & Consumption Anlys 3 _____</p>
<p>Second Language: 2nd semester level course must be graded 'C' (0-8 Units) or better Complete one of the following or CLEP exam:</p> <p>A. Pass a language proficiency exam at 2nd semester level _____</p> <p>B. Complete courses through 2nd semester proficiency _____</p>	<p>EWRE Required Core Courses: (18 Units)</p> <ul style="list-style-type: none"> AREC217 – Econ. Food & Ag., Sustn. Soltns for Chg World 3 _____ AREC339 – Economic Statistics (F) *** 3 _____ AREC360 – Poverty & Development of Nations (Sp) 3 _____ AREC403 – Analysis of Economic Data ***& AREC339 3 _____ AREC464 – Economics of Policy Analysis (F) **** 3 _____ AREC479 – Econ. Anlys. of Water, Food & Env Pol. (Sp)**** 3 _____ <p>***pre-req calculus OR ****pre-req calc & interm. microeco</p>
<p>General Education:</p> <p>UNIV 101, intro portfolio, 1 unit required</p> <p>Building Connections 9 units required. 3 courses</p> <p style="text-align: center;">Artist Humanist Natural Scientist</p> <p style="text-align: center;">AREC217, required course & EP Social Scientist</p> <p>UNIV 301, intro portfolio, 1 unit required</p> <p>Exploring Perspectives 12 units required. 4 courses</p>	<p>Focus Area Courses/Units (FA): (24 units)</p> <p>1.) _____ 5.) _____</p> <p>2.) _____ 6.) _____</p> <p>3.) _____ 7.) _____</p> <p>4.) _____ 8.) _____</p>
<p>Mid-Career Writing Assessment (MCWA): Satisfied by a grade of A or B in 2nd semester English Comp or from one of: AED301, ALC422, AREC360, AREC450, AREC464, AREC479, ENGL307, ENGL308 and ENGL340.</p>	<p>Currently:</p> <ul style="list-style-type: none"> Total Units Required for Degree = 120 _____/120 Total Upper Division (UD) Units Req'd = 42 _____/42 Remaining to be completed: _____All units/_____UD 2.0 GPA required to graduate, cumulative, major & minor. 22 units of electives needed typically (98 total units from major, gen eds & foundation courses), less electives needed if a minor is added.
<p>Communication Skills Courses, choose 2 courses (5-6 Units)</p> <p>_____ <input type="checkbox"/> AED 301 Youth Leadership</p> <p>_____ <input type="checkbox"/> ALC 309 Leadership Principles & Practice</p> <p>_____ <input type="checkbox"/> AED 311 Professional Leadership Concepts</p> <p>_____ <input type="checkbox"/> ALC 409 Team & Organization Leadership</p> <p>_____ <input type="checkbox"/> ALC 410 Entrepreneurial Leadership in Ag & Life Sci.</p> <p>_____ <input type="checkbox"/> ALC 411 Principles & Appl. Of Org. Innovation</p> <p>_____ <input type="checkbox"/> ALC 422 Comm. Knowledge in Ag & Life Sci.</p> <p>_____ <input type="checkbox"/> COMM 101 Into to the Study of Communication</p> <p>_____ <input type="checkbox"/> COMM 119 Public Speaking</p> <p>_____ <input type="checkbox"/> ENGL 307 Business Writing</p> <p>_____ <input type="checkbox"/> ENGL 308 Technical Writing</p> <p>_____ <input type="checkbox"/> ENGL 340 Topics in Professional & Technical Writing</p> <p>_____ <input type="checkbox"/> ENVS 408 Scientific Writing for Env, Agric & Life Sciences*</p> <p>_____ <input type="checkbox"/> ENVS 415 Translating Environmental Science *</p> <p>_____ <input type="checkbox"/> HED 201 Foundations of Leadership</p> <p>_____ <input type="checkbox"/> HED 397b Project SOAR (2 units)</p> <p>_____ <input type="checkbox"/> SBE 202 Professional Communication & Presentations (Sp)</p> <p>* ENVS 408 and 415 will not count as both a Comm Skills course & focus area course.</p>	<p>Elective courses in AREC, not required with this major: Units</p> <p>AREC 150C-Sustaining Life: Global Economy of Food (F, BC) 3</p> <p>AREC 210-Understanding World of Commerce (Sp, EP Soc Sci) 3</p> <p>AREC 313-Economics of Futures Markets (F, can be FA course) 3</p> <p>AREC 315-Agribusiness Econ & Mgmt (F, can be FA course) 3</p> <p>AREC 365-Food Economy -Efficiencies, Gaps & Pols (BC, FA) 3</p> <p>AREC 397-Preparing for Career & Life Success (F) 1</p> <p>AREC 450-Financ. Mgmt for Agribus. (Sp, can be FA course) 3</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>

**Bachelor of Science in
Environmental & Water Resource
Economics**

**2024+ EWRE
General 4 year
plan**



Fall, Semester 1	
MATH 112, College Algebra	3
ENGL 1st semester composition	3
1st semester 2nd language	4
AREC 197c, Marginal Anlys for Economists	1
GE Core: EP or BC (BC: AREC150C)	3
GE Core: EP or BC	3
Total semester units:	17

Spring, Semester 2	
ENGL 2nd semester composition	3
2nd semester 2nd language	4
AREC217, EP Soc. Sci, EWRE reqmt	3
MIS 111-(Sp only) or BE 120	3
GE Core: EP or BC	3
UNIV 101, req'd	1
Total semester units:	17

Fall, Semester 3	
MATH 113/116, calculus, req'd	3
ECON 200, req'd	3
GE Core: EP or BC (BC: AREC365)	3
GE Core: EP or BC	3
GE Core: EP or BC	3
Total semester units:	15

Spring, Semester 4	
AREC 239, Sp only, Intro Statistics & Data Analysis, req'd	4
AREC 297, req'd, Spring only	1
Focus Area course 1 of 8	3
Communication skills course 1	3
UNIV 301, req'd	1
Minor or Elective, to reach 120 total units	2
Total semester units:	14

Fall, Semester 5	
AREC 304, req'd, Fall only	3
AREC 339, req'd, Fall only	3
Elective, UD	3
Focus Area course 2 of 8	3
UD minor course or UD elective	3
Total semester units:	15

Spring, Semester 6	
AREC 360, req'd, Spring only	3
Communication skills course 2	3
Focus Area course 3 of 8, UD	3
Focus Area course 4 of 8, UD	3
UD minor course or UD elective	3
Total semester units:	15

Fall, Semester 7	
AREC 464, req'd, Fall only	3
Focus Area course 5 of 8, UD	3
Focus Area course 6 of 8, UD	3
UD minor course or UD elective	3
Minor or Elective, to reach 120 total units	3
Total semester units:	15

Spring, Semester 8	
AREC 403, req'd, Spring only	3
AREC 479, req'd, Spring only	3
Focus Area course 7 of 8	3
Focus Area course 8 of 8	3
Total semester units:	12

Focus Area (FA) course options: this list is not exhaustive, some courses have pre-reqs, please seek EWRE advisor approval prior to taking courses not listed below.

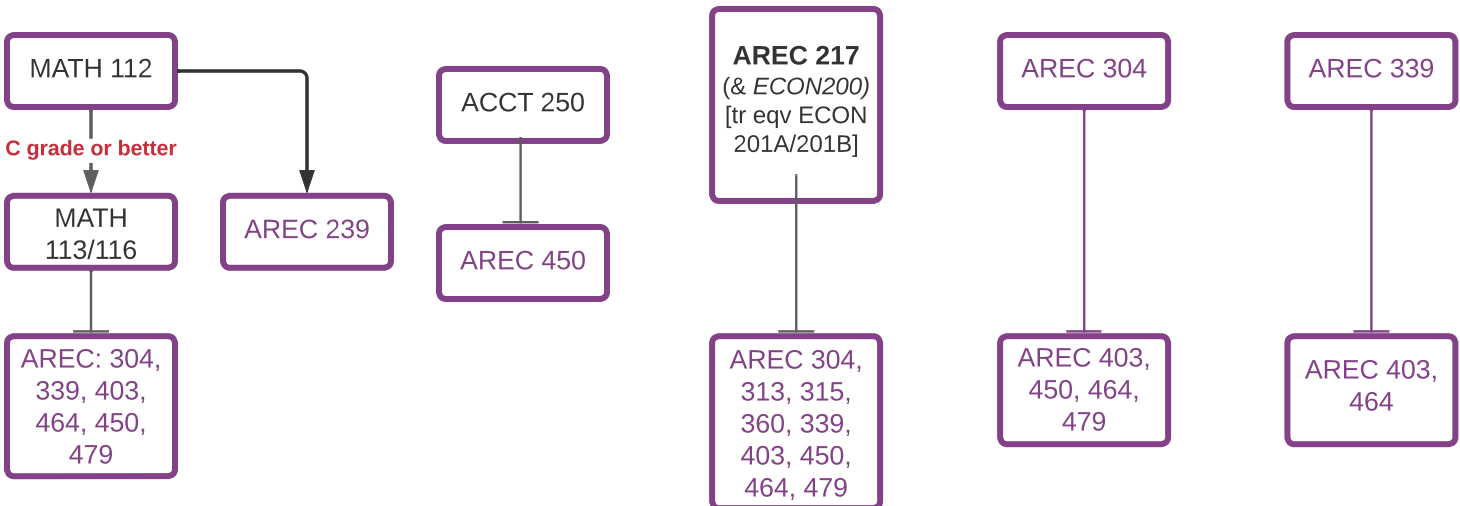
- AREC 365 Food Econ&Efficiencies (Fall)
- ARC 461E - Sustainable Design and the LEED Initiative
- BE 483 - Controlled Environment Sys.
- EHS 418 - Introduction to Human Health Risk Assessment
- ECOL/WFSC 454 - Water Harvesting
- ENVS 310 - Ecosystem Health Sys & Justice
- ENVS 305 - Pollution Science
- ENVS 316 - Soil Fertility & Plant Nutrition
- ENVS 450 - Green Infrastructure
- ENVS 462 - Env Soil & Water Chemistry
- ENVS 408 Scientific Writing for Env, Ag & Life Sciences (S) (Cannot share w/ comm skills)
- ENVS 415 Translating Environmental Science (S) (Cannot share w/ comm skills)
- ENVS/RNR 417 - Geog Inform Sys for Natural Resources (F, S)
- ENVS 418 - Intro to Human Health Risk Assessment (S)
- ENVS 444 Applied Env Law (F)
- ENVS 483 - Remote Sens. of the Env (S)
- EVS 260 - Environmental Studies: Ideas & Institutions
- GEOG 302 - Intro to Sustainable Dev.
- GEOG 303 - Field Study in Env. Geog.
- GEOG 304 - Water, Envmt & Society
- GEOG 330 - Intro to Remote Sensing (F)
- GEOG 362 - Environment & Developmt.
- GEOG 368 - The Green Economy
- GEOG 371 - Principles & Prct Reg Dev
- GEOG 379 - Urban Growth & Devlpmt
- GEOG 468 - Water & Sustainability
- GEOG 416f - GIS for Social Sciences (S)
- GEOG/AREC - 471 Problems in Reg Dev
- GEOS/ENVS - 412A - Ocean Sciences
- HIST 355 - U.S. Env. History (S)
- HIST 356 - Global Env History
- HWRS 415 - Intro Water Res Policy (S)
- HWRS 417A - Fundamentals of Water Quality
- HWRS 443A - Risk Assessment for Environmental Systems
- HWRS 460A - Watershed Hydrology
- PA 481 - Environmental Policy (S)
- PA 484 - Environmental Mgmt.
- PLG/GEOG 476 - The Land Development Process
- RNR 440 - Climate Change Adaptn.
- RNR 448 - Conservation Plng. & Wildland Recreation
- RNR 473 - Spatial Anlys. & Modeling
- RNR 496G - Climate Assessment: Explorations in Decision Support
- RNR 256 - Sustainable Cities & Soc.
- RNR 316 - Natural Res. Ecology
- RNR 321 - Natural Res. Mearmt (S)
- RNR 384 - Natural Res Mgmt Prcts.
- RNR 403 - Applications of Geographic Information Systems (F, S)
- RNR 480 - Natural Res Policy & Law
- RNR 485a - Natural Res Econ & Plng (S)
- SCI 396A- Lab to Capitol Hill: Science & Law (Sp)
- SCI 401 - Science Communication



Bachelor of Science in: Agribusiness Economics & Management (ABEM) emphasis options:

Bachelor of Science in: Environmental & Water Resource Economics (EWRE)

Agribusiness Management emphasis (ABEM-MGMT) (53 units + 9 BNAD minor units, & 28 elective units to each 120)		Agricultural Economics (ABEM-ECON) emphasis (53 units, minor optional/suggested, 37 additional elective units to reach 120)		Environmental & Water Resource Economics (EWRE) (68 units, minor suggested, 22 elective units to reach 120)
Required: AREC 297: Excel Applications for Economic Analysis (1 unit)	Required: AREC 217 Economics of Food & Agriculture: Sustainable Solutions for a Changing World (EP: Social Scientist)	Required: AREC 297: Excel Applications for Economic Analysis (1 unit)	Required: AREC 217 Economics of Food & Agriculture: Sustainable Solutions for a Changing World (EP: Social Scientist)	Required: AREC 297: Excel Applications for Economic Analysis (1 unit)
Required Supporting coursework (3): ECON200, MIS111, ACCT250		Supporting coursework (3): ECON200, & BE120 or MIS111, & ACCT250		Required pre-reqs (2): ECON 200, & BE 120 or MIS 111
Required Math (3): MATH112 & MATH113/116 & AREC 239- "Intro Statistics & Data Analysis" AREC197c suggested 1 unit, Marginal Anyls Applied Econ.	Required Communication Skills (2): Variety of course options from which to choose.	Required Math (3): MATH112 & MATH113/116 & AREC 239- "Intro Statistics & Data Analysis" AREC197c suggested 1 unit, Marginal Anyls Applied Econ.	Required Communication Skills (2): Variety of course options from which to choose.	Required Math (3): MATH112 & MATH113/116 & AREC 239- "Intro Statistics & Data Analysis" AREC197c suggested 1 unit, Marginal Anyls Applied Econ.
ABEM-MGMT Core Required (8): Fall: AREC 304, AREC 313, AREC 315, AREC 339, & AREC 464 Spring: AREC 360, AREC 403, & AREC 450		ABEM-ECON required core (6): Fall: AREC 304, AREC 315, AREC 339, AREC 464 & Spring: AREC 403, AREC 479		EWRE core & concentration (6): Fall: AREC 304, AREC 339, AREC 464 Spring: AREC 360, AREC 403, AREC 479
+		+		+
BNAD minor is required with this emphasis		Concentration courses (2): 1 of 2 must be from AREC course subject: AREC313, AREC360, AREC365 & AREC450, the 2nd course may come from an alternate course list provided by ABEM academic advisor.		Focus Area (FA) Required: 24 units, from variety of course options
ACCT 250, ECON 200 & MIS 111	BNAD 301, 302 & 303			



For diagram purposes only, not all degree requirements shown here. upd: 10/2023



AREC flowchart of standard pre-reqs & core requirements for ABEM & EWRE

- - - - - = suggested to take prior to AREC course
- _____ = required pre-requisite/course sequence

