

# Environmental & Water Resource Economics Major (EWRE)

2019-2020 catalog year

<p><b>Composition Requirements:</b> (3-6 Units)</p> <p>ENGL 101/107 – Freshman Composition 3 ___</p> <p>ENGL 102/108 – Freshman Composition 3 ___</p> <p>Or or</p> <p>ENGL 109H – Advanced First Year Composition 3 ___</p> <hr/> <p><b>Mathematics: 1 course required from each group</b> (6-10 Units)</p> <p>MATH 112 - College Algebra (C or better needed for calculus) 3 ___</p> <p><b>Intro Statistics Requirement: Any ONE of the below courses:</b></p> <p>AREC 239 (Sp) or MATH 163, SBS 200, ISTA 116 or BNAD 276 3-4 ___</p> <p><b>Calculus Requirement: Any ONE of the below courses:</b></p> <p>Math 113 or 116(MIS111 pre-req)or 122A&amp;B or 125 3 ___</p> <hr/> <p><b>Second Language: 2<sup>nd</sup> semester must be 'C' or better</b> (0-8 Units)</p> <p>Complete <b>one</b> of the following or CLEP exam:</p> <p>A. Pass a language proficiency exam at 2<sup>nd</sup> semester level ___</p> <p>B. Complete courses through 2<sup>nd</sup> semester proficiency ___</p> <hr/> <p><b>General Education:</b></p> <p><b>Tier I: (18 Units)</b></p> <p>A. Individuals and Societies (150's)</p> <p>_____ 3 ___</p> <p>_____ 3 ___</p> <p>B. Natural Sciences (170's)</p> <p>_____ 3 ___</p> <p>_____ 3 ___</p> <p>C. Traditions and Cultures (160's)</p> <p>_____ 3 ___</p> <p>_____ 3 ___</p> <p><b>Tier II: (9 Units)</b></p> <p>A. Arts _____ 3 ___</p> <p>B. Humanities _____ 3 ___</p> <p>C. Natural Science _____ 3 ___</p> <p>--- Diversity Emphasis _____</p> <p>(1 course, some Tier 2 Arts, Tier 2 Humanities and all 160A courses also can complete this requirement)</p> <hr/> <p><b>Mid-Career Writing Assessment (MCWA):</b> Satisfied by a grade of A or B in 2<sup>nd</sup> semester English Comp or from one of: AED301, ALC422, AREC360, AREC450, AREC464, AREC479, ENGL307, ENGL308 and ENGL340.</p> <hr/> <p><b>Communication Skills Courses, choose 2 courses</b> (5-6 Units)</p> <p>_____ <input type="checkbox"/> AED 301 Youth Leadership</p> <p>_____ <input type="checkbox"/> ALC 309 Leadership Principles &amp; Practice (Prev AED 309)</p> <p>_____ <input type="checkbox"/> AED 311 Professional Leadership Concepts</p> <p>_____ <input type="checkbox"/> ALC 409 Team &amp; Organization Leadership (Prev AED 409)</p> <p>_____ <input type="checkbox"/> ALC 410 Entrepreneurial Leadership in Ag &amp; Life Sci. (Prev AED 410)</p> <p>_____ <input type="checkbox"/> ALC 411 Principles &amp; Appl. Of Org. Innovation (Prev AED 411)</p> <p>_____ <input type="checkbox"/> ALC 422 Comm. Knowledge in Ag &amp; Life Sci. (Prev AGTM 422)</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 &amp; Technical Writing</p> <p>_____ <input type="checkbox"/> ENVS 408 Scientific Writing for Env, Agric &amp; 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 &amp; Presentations (Sp)</p> <p>* ENVS 408 and 415 will not count as both a Comm Skills course &amp; focus area course(s).</p>	<p><b>Computer Skills Requirements:</b> (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> <hr/> <p><b>Economics Requirements:</b> (9 Units)</p> <p>ECON 200 – Basic Economic Issues 3 ___</p> <p>(Transfer crs: ECON201A[micro]/ECON201B[macro])</p> <p><b>Intermediate Economics: both courses are required</b></p> <p>AREC 304 (F) Production &amp; Consumption Anlys.* 3 ___</p> <p>ECON 331 (Sp) Interim. Macroeconomics ** 3 ___</p> <p>* Alternate course options for intermediate microecon: ECON 301 (Sp) or in Summer/Winter only-ECON 300 or ECON 361.</p> <p>** Alternate course options for intermediate macroecon: ECON 330 or ECON 332, in Summer/Winter only.</p> <p>For Summer/Winter enrollment help: (ECON300/361/330/332) students must email: <a href="mailto:econreg@eller.arizona.edu">econreg@eller.arizona.edu</a></p> <hr/> <p><b>EWRE Required Core Courses:</b> (18 Units)</p> <p>AREC 339 – Economic Statistics (F) *** 3 ___</p> <p>AREC360 – Poverty &amp; Development of Nations (Sp) 3 ___</p> <p>AREC 403 – Analysis of Economic Data (Sp) *** 3 ___</p> <p>AREC 464 – Economics of Policy Analysis (F) **** 3 ___</p> <p>AREC479 – Econ. Anlys of Water, Food &amp; Envr Pol (Sp) **** 3 ___</p> <p><b>One Environmental Economics course</b> 3 ___</p> <p><i>See course options list from EWRE advisor</i></p> <p>***pre-req calculus OR ****pre-req calc &amp; interim. microecon.</p> <hr/> <p><b>Focus Area Courses/Units (FA):</b> (21 units)</p> <p>1.) _____ 5.) _____</p> <p>2.) _____ 6.) _____</p> <p>3.) _____ 7.) _____</p> <p>4.) _____</p> <hr/> <p style="text-align: right;"><b>Currently:</b></p> <ul style="list-style-type: none"> <li>• Total Units Required for Degree = 120 ___/120</li> <li>• Total Upper Division (UD) Units Req'd = 42 ___/42</li> <li>• Remaining to be completed: ___All units / ___UD</li> <li>• 2.0 GPA required for all GPAs to graduate</li> <li>• 11 units of electives needed (109 total units from major), less electives needed if a minor declared.</li> </ul> <hr/> <p><b>Addtl. courses in AREC, not required with this major:</b></p> <p>AREC150C-Sustaining Life: Global Economy of Food (F, T1 Indv) 3</p> <p>AREC210- Understanding World of Commerce (Sp, T2 Indv) 3</p> <p>AREC397- Preparing for Career &amp; Life Success (F) 1</p> <p>AREC313 – Economics of Futures Markets (F, can be FA course) 3</p> <p>AREC315 – Agribusiness Econ &amp; Mgmt (F, can be FA course) 3</p> <p>AREC450 – Financ. Mgmt for Agribus. (Sp, can be FA course) 3</p> <hr/> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>
---	---

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.

- ARC 461E - Sustainable Design and the LEED Initiative
- 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. Mearmnt (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 401 - Science Communication

\* = new focus area course option as of 7/2018

EWRE  
4 YEAR PLAN

**EWRE 2019-2020**

		Year 1		
<b>Fall Semester 1st semstr.</b>	Units		<b>Spring Semester 2nd semstr.</b>	Units
Math112 College Algebra	3		Math113 or Math116 or Math122A/B or Math125	3
ENGL101 First Year Composition	3		ENGL102 First Year Composition	3
1st semester 2nd language	3		2nd semester 2nd language	4
Tier I General Education	4		ECON200	3
Tier I General Education	3		BE120 or MIS111	3
<b>total</b>	<b>16</b>		<b>total</b>	<b>16</b>

		Year 2		
<b>Fall Semester 3rd semstr.</b>	Units		<b>Spring Semester 4th semstr.</b>	Units
T2 Arts	3		AREC 239 intro stats	3
Tier I General Education	3		T2 Humanities	3
Tier I General Education	3		T2 Natural Science	3
Tier I General Education	3		Communication skills course	3
Tier I General Education	3		Elective	3
<b>total</b>	<b>15</b>		<b>total</b>	<b>15</b>

		Year 3		
<b>Fall Semester 5th semstr.</b>	Units		<b>Spring Semester 6th semstr.</b>	Units
AREC304 Fall only	3		Communication skills course	3
AREC339 Fall only	3		AREC360 Spring only	3
Focus area course	3		ECON331 Spring only	3
Focus area course-Upper Division	3		AREC297 Spring only	1
Focus area course-Upper Division	3		Focus area course-Upper Div.	3
AREC397 Fall only, optional course	1		Focus area course-Upper Div.	3
<b>total</b>	<b>16</b>		<b>total</b>	<b>16</b>

		Year 4		
<b>Fall Semester 7th semstr.</b>	Units		<b>Spring Semester 8th semstr.</b>	Units
AREC464 Fall only	3		AREC403 Spring only	3
Environmental Economics course	3		AREC479 Spring only	3
Focus area course-Upper Division	3		Elective - Upper Division	3
Focus area course-Upper Division	3		Elective	3
Elective	3			
<b>total</b>	<b>15</b>		<b>total</b>	<b>12</b>