

Appendix A. Checklist 1 for WRE degree programs

WATER RESOURCES ENGINEERING PROGRAM REQUIREMENTS		
To be signed by WRE representative of student's committee and submitted with the student's program of study. Students must complete these requirements to receive a WRE degree.		
Student's Name : _____		
Degree (circle one):	MS	PhD
<u>Undergraduate Fundamentals</u>		
One year, Calculus Equiv. of: MTH 251, 252, (253 or 254)	<input type="checkbox"/>	<input type="checkbox"/>
Applied Differential Equations Equiv. of: MTH 256	<input type="checkbox"/>	<input type="checkbox"/>
One year Chemistry	<input type="checkbox"/>	<input type="checkbox"/>
One year Physics	<input type="checkbox"/>	<input type="checkbox"/>
<u>Graduate Requirements</u>		
Water Resources Core Courses (6 cr.)		
WRP 524: Socio-technical Aspects of Water Resources	<input type="checkbox"/>	<input type="checkbox"/>
WRP, WRS, or WRE 507: Water Resources Seminar MS: 2 Credits total PhD: 3 Credits total	<input type="checkbox"/>	<input type="checkbox"/>
WRP, WRS, or WRE 505 Water Resources Journal Club*	<input type="checkbox"/>	<input type="checkbox"/>
Graduate Engineering Credits		
BEE 512: Physical Hydrology (3 cr.)	<input type="checkbox"/>	<input type="checkbox"/>
Modeling Techniques (BEE 529 or equivalent) (highly recommended: CE 547 Intro. Fluid Mechanics)	<input type="checkbox"/>	<input type="checkbox"/>
MS, 12 Credits	<input type="checkbox"/>	<input type="checkbox"/>
PhD, 15 Credits	<input type="checkbox"/>	<input type="checkbox"/>
Water Science Courses/Credits		
MS: 6 Credits	<input type="checkbox"/>	<input type="checkbox"/>
PhD: 9 Credits	<input type="checkbox"/>	<input type="checkbox"/>
Thesis/Project Credits		
MS Thesis (6–12 cr.)	<input type="checkbox"/>	<input type="checkbox"/>
MS Project (6 cr.)	<input type="checkbox"/>	<input type="checkbox"/>
PhD Dissertation (36 – 45 cr.)	<input type="checkbox"/>	<input type="checkbox"/>
Exit Requirements (may be met at previous institution, incl. undergraduate)		
Professional Preparation Course (GEO 518 or equiv.)	<input type="checkbox"/>	<input type="checkbox"/>
37 cr. of AIH-required water coursework ¹	<input type="checkbox"/>	<input type="checkbox"/>

* Journal club must be taken with one of the seminars. Students can choose to take WRP 505 and WRP 507, WRS 505 and WRS 507, or WRE 505 and WRE 507 together, and must take one (MS) or two (PhD) additional seminars, usually (but not limited to) WRP 507.

¹ 15 cr. in Category I of the AIH educational criteria (<http://aih.engr.siu.edu/hydro-certification.html>) defined as courses in which 90% of the material is hydrology, hydrogeology, or water quality, 13 cr. in Category II of the AIH educational criteria, defined as courses in which 10% of the material is hydrology, hydrogeology, or water quality, and 9 cr. in Category III of the AIH educational criteria, generally other science, water, engineering, or natural resources policy coursework.