

**Checklist for Graduating Class of 2003**  
**Watershed Management Minor/Certificate (undergraduate)**  
**(20 hours)**

- The Watershed Management Minor/Certificate is a cross-college program available to all undergraduate students in the university.
- Undergraduate students select from the courses below. Students must satisfy course prerequisites.
- With satisfactory completion of the program's 20 hour requirements with at least a 2.0 GPA in those courses, the student will receive a printed certificate from the Virginia Water Resources Research Center. Upon graduation, the minor will be noted on the student's transcript.

A. Required Core (5 hours):	Credit Hours	Check
UAP 4374      Land Use and Environment: Planning and Policy	3	_____
ALS 4614      Watershed Assessment, Management & Policy	2	_____
<b>B. Additional Courses (15 credits):</b>		
<b>1. Watershed Hydrology (choose 1 course, 3 hours)</b>	3	_____
BSE 2384      Soil & Water Resources Management		
BSE 3305      Land and Water Resources Engineering (pre: 2106)		
CEE 4304      Hydrology (pre: 3314, 3304)		
FOR 4354      Forest Soils and Hydrology (pre: 3314)		
GEOL 4804      Groundwater Hydrology		
LAR 4244      Landscape Technology Hydrology		
<b>2. Watershed Water Quality (choose 1 course, 3 hours)</b>	3	_____
BSE 4304      Nonpoint Source Pollution Modeling and Management (pre: 3306)		
BSE 4324      Nonpoint Source Pollution (pre: CEE 3104)		
CEE 4354      Environmental Hydrology (pre: 3104, 3314, 3304)		
CSES/CEE 4594      Soil and Groundwater Pollution (pre: 4314, 3314, 3304)		
ENT 4484      Freshwater Biomonitoring (pre: BIO 2804 & BIO/ENT 4354 or FIW 4424 or 4614)		
<b>3. Watershed Ecology (choose 1 course, 3 hours)</b>	3	_____
BIO 4004      Freshwater Ecology (pre: 2804)		
BIO/ENT 4354      Aquatic Entomology		
CEE/BIO 4154      Aquatic Microbiology (pre: 2604) (new: BIO/CSES/CEE Env Micro)		
FOR 4374      Forested Wetlands (pre: CSES 3114)		
LAR 3004      Natural and Human Systems (pre: LAR 1004)		
<b>4. Watershed Geospatial Information Systems (choose 1 course, 3 hours)</b>	3	_____
BSE 4344      Geographic Information Systems for Engineers		
FOR 4214      Forest Photogrammetry		
GEOG 4084      Intro. to Geographic Information Systems		
GEOG 4354      Intro. to Remote Sensing		
GEOG 4384      ARC/INFO Geographic Information System		
<b>5. Watershed Law, Policy, and Planning (choose 1 course, 3 hours)</b>	3	_____
AAEC 3314      Environmental Law		
AAEC 4304      Environmental and Sustainable Development Economics		
AAEC 4344      Sustainable Development Economics		
CEE 4344      Water Resources Planning		
FOR 4434      Forest Resource Policy		
LAR 3044/5044      Land Analysis and Site Planning		
UAP 4184      Community Involvement and Public Participation		
UAP 4344      Law of Critical Environmental Areas		

APPROVED

MAY 10 2002

COMMISSION ON UNDERGRADUATE  
STUDIES AND POLICIES

CORRECTED

4-5-05