



ENVIRONMENTAL EDUCATION and INTERPRETATION PROFESSIONAL CERTIFICATE

This certificate is open to professionals and graduate students who have a background or interest in natural resources and/or education.

This certificate consists of 12 credits and can be obtained fully online. Listed courses include face-to-face and online. You must maintain a 3.0 GPA minimum in these courses.

- NRES 701 or 501; NRES 705; NRES 767 or 568; NRES 771 or 772

ENVIRONMENTAL EDUCATION and INTERPRETATION UNDERGRADUATE CERTIFICATE

The certificate is open to undergraduate students who have an interest in natural resources and/or education. Students minoring or majoring in the [Resource Management: Environmental Education and Interpretation, B.S.](#) or [Resource Management: Wildlife Education, B.S.](#) are not eligible for this certificate.

This certificate consists of 12-13 credits. You must maintain a 2.25 GPA minimum in these courses.

- NRES 301 or NRES 370; NRES 368, 374, or 376
- 3-4 credits from: NRES 281, 302, 305; NRES 369 or 478

ENVIRONMENTAL SCIENCE

Although targeted at secondary science majors, this certificate is open to all students.

Consists of 14 credits.

- Choose one of the following: BIOL 110, 111, 130, 160
- Take a minimum of three Natural Resources credits from: NRES 220 or WATR 220; NRES 324 or WATR 324; NRES 458; PSEN 382 or WATR 38 or WSTE 382; WSTE 380
- Take a minimum of three Interdisciplinary credits from: NRES 200, 341, 365, 372, 441, 442, 473, 478
- Take a second course from either the Natural Resources or Interdisciplinary category, 3 credits

INVASIVE SPECIES MANAGEMENT CERTIFICATE

Invasive species are a growing impediment to natural resource management impacting native communities of plants and animals, recreational pursuits as well as food and fiber production. This certificate provides skills needed to control, manage, and educate the public about non-invasive species that are problematic. It is interdisciplinary and provides the skills needed to understand and manage invasive species in aquatic and terrestrial environments. Coursework includes required and elective coursework in three topical areas listed below.

Consists of 13-21 credits.

- NRES 324 or WATR 324; NRES 405 (Plant ID subtitle) or BIOL 342
- Choose two of the following:
 - BIOL 342; BIOL 347; BIOL 361 or WATR 361; BIOL 367; BIOL 374 or WATR 384; FOR 232; FOR 342; FOR 424; FOR 426; WLDL 372
- FOR 224 or FOR 305 or FOR 396; FOR 336; NRES 336
- Choose one of the following:
 - FOR 324; NRES 301; NRES 368; NRES 458; NRES 459; WATR 360 or WLDL 360; WATR 484; WLDL 305; WLDL 450; WLDL 458

FIRE SCIENCE CERTIFICATE

The Fire Science Certificate is intended to provide the basics for a student interested in wildland fire. This certificate is a skills-based certificate and includes required field experiences, certifications, and formal classes.

- FOR 224; FOR 324; FOR 326; FOR 381 (fire management focused internship) or NRES 454
- Successfully complete two of the following Federal Wildland Fire Fighting Training Modules
 - S-131 Fire Fighter Type 1; S-211 Portable Pumps; S-212 Use of Chain Saw on the Fireline; S-219 Firing Operations
- Complete one of the following prescribed burning experiences
 - Participate in one prescribed burning trip organized by the UWSP Fire Crew in regions outside of Central Wisconsin plus two of the prescribed burns conducted by the Crew
 - Complete a summer job in which the primary job duties involved prescribed burning

FOREST HEALTH CERTIFICATE

Consists of 13 credits

- FOR 232, 324, 336, 337, 424, 426

TIMBER MARKING CERTIFICATE

The Timber Marking Certificate is intended to provide accelerated training for you to enter the workforce prepared to mark timber to reach a range of landowner goals. The main categories of training goals include: basic northern hardwood marking, marking for timber quality improvement, marking for wildlife habitat improvement, and marking for restoration of functions/processes.

- FOR 370, FOR 432, FOR 434 (Take 3 credits by completing one or more subtitles), FOR 436

TREES AND GREENSPACE MANAGEMENT CERTIFICATE

Consists of 12 credits

- Take at least 7 credits from: FOR 331, 336, 385, 395, 396, 435, 444
- FOR 342
- FOR 480 or 485

WETLAND SCIENCE CERTIFICATE

The Certificate in Wetland Science is recognition of completion of a course of study in physical, biological and natural resources sciences that concentrates on the identification, evaluation and management of wetlands. When you complete the certificate requirements, you will have met the academic requirements necessary to apply for certification as a “wetland professional in training” by the Society of Wetland Scientists. For more information contact the CNR Student Success Center, Room 122 TNR, and apply by the first semester of your junior year.

What it is:

The Society of Wetland Scientists [<http://www.wetlandcert.org/overview>] has a formal process by which practitioners can be certified by the Society as a “Professional Wetland Scientist”. The ‘Wetland Professional in Training [WPIT]’ is the first step in the process to achieve this certification and represents the educational foundation needed to become a Professional Wetland Scientist (PWS). The minimum educational requirements to become a WPIT are a BA or BS degree and 15 semester hours (or equivalent*) each in biological and physical sciences, and 6 hours of quantitative courses. To be certified as a Wetland Scientist, 5 years of professional experience and 15 additional semester hours in wetland- related courses are required. If a student completes all the educational requirements for a PWS, he/she will have completed the requirements for what is called the ‘Wetland Certificate’ at the university. Note that the Certificate is not a major or minor, and may be pursued by any major; however, the course work requirements are most efficiently obtained by a student majoring in any of the disciplines in the College of Natural Resources, or a major in Biology. In most cases, a student will be able to meet Certificate requirements by completing seven to eleven credits in addition to the requirements for their major.

WETLAND SCIENCE CERTIFICATE, CON'T

What it does:

Having completed the academic requirements for a WPIT, a graduate will have formal recognition among the many professionals who work on wetland delineation, wetland restoration and wetland creation [or mitigation]. After achieving the work experience requirement [see website for details], the graduate may apply for PWS certification.

ACADEMIC GUIDELINES*

Biological Sciences - 15 credits are required for the WPIT; the following courses can apply to this requirement:

Biology 101, 130, 160, 305, 338, 342, 351, 355, 374, 375, 376; Biology/Water 361; Natural Resources 151; Water 380, 384, 388, 488; Forestry 232, 332; Wildlife 340

Physical Sciences – 15 credits are required for the WPIT; the following courses can apply to this requirement:

Chemistry 101, 105, 106; Physics 101, 201, 202; Geology 104, 330, 352; Soil 359, 360, 361, 362**, 465, Water 389**, 390

Quantitative Sciences – 6 credits are required for the WPIT; the following courses can apply to this requirement:

Math 111, 112, 225, 226, 255; Forestry 321; Wildlife 311, 353, 354; Water 353

Advanced Courses in Wetland Science – 15 credits of specialized courses are required for Professional Wetland Scientist (PWS) certification. These are NOT needed for the WPIT. The courses at UWSP that apply to this category are:

Water/Wildlife 360; Wildlife 361; Biology 347; Water 389**, 454; Natural Resources 251; Water/Soil 366; Soil 362**.

*It should be noted that educational requirements can be met by appropriate offerings in the form of Continuing Education classes, and workshops taught by Wetland Scientists, experts, faculty, and other suitably trained staff. The suitability of these offerings is determined by the Society. There are courses other than those listed that may apply to a category; consult the Society website for more information. THERE IS NO COURSE THAT IS AN ABSOLUTE REQUIREMENT.

**Soil 362 and WAT 389 can count toward either the Physical Science category or the Advanced Courses in Wetland Science category but it cannot count for both.