Programs in Turfgrass Management
“Whether you are taking a single Penn State World Campus turfgrass course or enrolled in one of our 100% online degree programs, you can rest assured you are receiving a top-quality education. That’s because all our courses are taught by the same distinguished faculty who teach on campus and bring a wealth of industry experience into the classroom. We offer a wide range of education options, from a basic 15-credit certificate to our comprehensive Master of Professional Studies in Turfgrass Management. Our commitment to high academic standards ensures that both our students and industry professionals continue to recognize the value and expertise represented by a Penn State turfgrass education.”

— Dr. Benjamin McGraw
Associate professor, turfgrass science
Coordinator, turfgrass science academic programs
Online Turfgrass Programs

As a leader in turfgrass education since 1929, Penn State has a reputation in the turfgrass industry that is hard to ignore. As the first university to offer both a two-year technical program and a turfgrass science major, it remains the only institution offering online graduate and undergraduate degree programs in turfgrass science and management.

Whether you’re entering the industry or planning to take your career to the next level, we have a turfgrass degree or certificate to help you meet your goals. Offered completely online through Penn State World Campus, our programs allow you to add a highly regarded credential to your résumé without ever setting foot on campus.

Online turfgrass programs offered through Penn State World Campus:

› Undergraduate Certificate in Turfgrass Management, Basic
› Undergraduate Certificate in Turfgrass Management, Advanced
› Associate in Science in Turfgrass Science and Management
› Bachelor of Science in Turfgrass Science
› Master of Professional Studies in Turfgrass Management

Your Experience Counts

Students who hold a lead or supervisory position in the turfgrass industry may apply to have the internship requirement waived. Students with a current pesticide license may apply to receive credit for TURF 230 (Turfgrass Pesticides) without taking the course. All requests will be considered on a case-by-case basis.

Visit worldcampus.psu.edu/turfgrass-management to review curriculum requirements.
Undergraduate Certificate in Turfgrass Management, Basic

Penn State has offered a certificate program in turfgrass management for more than 50 years; now Penn State World Campus enables you to continue working in golf course maintenance, sod production, or athletic field maintenance while you complete the program. The course work can help you expand your knowledge and gain the skills you need to assess, treat, and manage turf in any climate or terrain.

Curriculum

The basic online Undergraduate Certificate in Turfgrass Management is a 15-credit program of study. The courses cover pest management, turfgrass cultural systems, and turfgrass edaphology — and can culminate in a series of case studies in turfgrass management.

**Core Courses (4 credits)**

- **TURF 230**: Turfgrass Pesticides — Required (1 credit)
- **TURF 235**: The Turfgrass — Required (3 credits)

**Additional Courses (select 11 credits)**

- **ENT 317**: Turfgrass Insect Pest Management (3 credits)
- **PPEM 412**: Turfgrass Disease Management (3 credits)
- **TURF 238**: Turf and Ornamental Weed Control (3 credits)
- **TURF 307**: Golf Course Irrigation and Drainage (3 credits)
- **TURF 425**: Turfgrass Cultural Systems (3 credits)
- **TURF 434**: Turfgrass Edaphology (3 credits)
- **TURF 435**: Turfgrass Nutrition (4 credits)
- **TURF 436W**: Case Studies in Turfgrass Management (3 credits)

“I can't say enough about how much I have learned. I am able to discuss subjects at hand with my boss and other professionals in the field with greater confidence and understanding.”

— Doug K., Undergraduate Certificate in Turfgrass Management, Advanced
Undergraduate Certificate in Turfgrass Management, Advanced

This online certificate program is comprehensive and builds on the basic Undergraduate Certificate in Turfgrass Management program. It is ideal if you already have a bachelor’s degree in another field or are enrolled in our Bachelor of Science in Turfgrass Science program.

The advanced certificate is designed for current or future turfgrass management professionals who want training that complies with the Golf Course Superintendents Association of America professional development initiative.

Curriculum

This advanced certificate requires 30 credits of course work in the areas of pesticides, turfgrass varieties, and problem analysis and a 1-credit colloquium course. You may choose up to 22 credits of additional courses in topics such as soils, turfgrass nutrition, and disease management.

Core Courses (8 credits)

- **TURF 230**: Turfgrass Pesticides (1 credit)
- **TURF 235**: The Turfgrass (3 credits)
- **TURF 490**: Colloquium (1 credit)
- **TURF 495**: Internship (3 credits)

Additional Courses (select 21–22 credits)

- **ENT 317**: Turfgrass Insect Pest Management (3 credits)
- **PPEM 412**: Turfgrass Disease Management (3 credits)
- **SOILS 101**: Introductory Soil Science (3 credits)
- **TURF 238**: Turf and Ornamental Weed Control (3 credits)
- **TURF 307**: Golf Course Irrigation and Drainage (3 credits)
- **TURF 425**: Turfgrass Cultural Systems (3 credits)
- **TURF 434**: Turfgrass Edaphology (3 credits)
- **TURF 435**: Turfgrass Nutrition (4 credits)
- **TURF 436W**: Case Studies in Turfgrass Management (3 credits)
Associate in Science in Turfgrass Science and Management

The online associate degree program can give you the knowledge and skills to plan and implement projects, direct personnel, communicate effectively, conduct training programs, and manage finances. You can also apply the credits you earn in this program to the requirements for our Bachelor of Science in Turfgrass Science.

Curriculum

This 61-credit degree includes courses in biology, chemistry, and ethics, in addition to the core curriculum. The science and General Education courses can provide the knowledge you need to produce and maintain the highest quality turfgrass at golf courses, athletic fields, parks, and recreation areas.

**Core Courses (31 credits)**
- **BIOL 11**: Introductory Biology I (3 credits)
- **CHEM 202**: Fundamentals of Organic Chemistry I (3 credits)
- **ENGL 15**: Rhetoric and Composition (3 credits)
- **ENT 317**: Turfgrass Insect Pest Management (3 credits)
- **MATH 21**: College Algebra I (3 credits)
- **PHIL 103W**: Introduction to Ethics (3 credits)
- **SOILS 101**: Introductory Soil Science (3 credits)
- **TURF 230**: Turfgrass Pesticides (1 credit)
- **TURF 235**: The Turfgrass (3 credits)
- **TURF 238**: Turf and Ornamental Weed Control (3 credits)
- **TURF 295**: Internship (3 credits)
Bachelor of Science in Turfgrass Science

You can maximize your career potential in any turfgrass-related field by earning your Bachelor of Science in Turfgrass Science. Taken independently or as a follow-up to the advanced certificate or the associate degree, this online bachelor’s degree provides you with an integrated curriculum that includes basic and applied sciences, business management courses, and an internship that can prepare you for any career related to turfgrass management.

Curriculum

The 120-credit bachelor’s degree program includes course work that is directly applicable to contemporary turfgrass management. In addition to covering pesticides, weed control, morphology, entomology, pathology, edaphology, and cultural systems, the program is designed to sharpen your skills in such areas as business management, speech communications, and chemistry.

Core Courses (49 credits)
AGBM 106: Agribusiness Problem-Solving (3 credits)
CHEM 202: Fundamentals of Organic Chemistry I (3 credits)
ENT 317: Turfgrass Insect Pest Management (3 credits)
MATH 21: College Algebra I (3 credits)
PPEM 412: Turfgrass Disease Management (3 credits)
SOILS 101: Introductory Soil Science (3 credits)

STAT 200: Elementary Statistics (4 credits)
TURF 230: Turfgrass Pesticides (1 credit)
TURF 235: The Turfgrass (3 credits)
TURF 238: Turf and Ornamental Weed Control (3 credits)
TURF 307: Golf Course Irrigation and Drainage (3 credits)
TURF 425: Turfgrass Cultural Systems (3 credits)
TURF 434: Turfgrass Edaphology (3 credits)
TURF 435: Turfgrass Nutrition (4 credits)
TURF 436W: Case Studies in Turfgrass Management (3 credits)
TURF 490: Colloquium (1 credit)
TURF 495: Internship (3 credits)
Master of Professional Studies in Turfgrass Management

If you work as a manager of a turfgrass facility, golf course, or professional sports complex, Penn State World Campus can help you advance your career with the online Master of Professional Studies in Turfgrass Management program. This program balances turfgrass courses with hands-on, applicable business courses that integrate theory and practice in addressing real problems encountered in turfgrass facility management.

Curriculum

In this 30-credit graduate program, you can learn to apply scientific concepts to fundamental problems that are part of managing complex turfgrass ecosystems. In addition to completing the five core courses, you will select five elective courses (15 credits) that will determine the area of concentration for your degree; you can focus on turfgrass science or business-related electives.

Core Courses (15 credits)

- **AGRO 596**: Individual Studies in Agronomy (3 credits)
- **AGRO 851**: Applied Plant Population Biology (3 credits)
- **TURF 850**: Turfgrass Physiology (3 credits)

Elective Courses (15 credits)

- **TURF 852**: Turfgrass Health Management (3 credits)
- **TURF 853**: Interpreting Turfgrass Science Literature (3 credits)

“I’m trying to set myself apart from others out there in the industry. The reason I chose Penn State is pretty obvious. They already have the most recognized turfgrass program in the world.”

— Rick P., Master of Professional Studies in Turfgrass Management
The Penn State Difference

Experience in Distance Education
As a distance education pioneer, Penn State has developed a nationally recognized support system for students who are geographically removed from campus. Our offerings have received high satisfaction ratings from students in terms of course content and student services.

Connect with Classmates
Interact with dedicated, goal-oriented peers from across the nation, creating a network of great ideas. As you communicate daily with other professionals, you’ll gain insights that you can apply to your job immediately.

Library Services
As a Penn State World Campus student, you will have access to one of the largest research library collections in North America — the Penn State University Libraries system, which holds more than 800 online research databases, 110,000 scholarly journals, and 1 million electronic books. You can search the online catalog and review databases as if you were sitting at a terminal in any Penn State Library.

Learner and Technical Support
Without having to set foot on campus, you will have access to an array of support services, including course scheduling assistance and academic advising, technical support offered by the friendly IT Service Desk staff, and career counseling with a licensed professional counselor.

“We’re the only program that has this kind of structure, so that people can enter at any point. Students in the basic or advanced certificate programs can then progress on and actually earn a bachelor’s degree and ultimately a master’s degree.”

—Dr. Al Turgeon, Professor emeritus of turfgrass management
Founder, Penn State World Campus
Turfgrass science programs
Begin Your Application Today

To begin taking courses, you need to submit the online application form for the program of your choice. To start the application process, visit [worldcampus.psu.edu/turfgrass-management](http://worldcampus.psu.edu/turfgrass-management), choose your program of interest, and click on “How to Apply.”

To apply to a program, you need to submit a complete Penn State World Campus online application form, with fee, and:

### Certificates
- official transcripts (high school or GED)

### Associate and Bachelor’s
- official transcripts (high school, GED, military, and/or college)
- TOEFL or IELTS score (if applicable)

### Master’s
- a graduate school application
- official transcripts from each institution attended
- references
- letter of professional introduction
- TOEFL or IELTS score (if applicable)

**Note:** Applicants to the master’s degree program must have received, from an accredited institution, a baccalaureate degree with requirements substantially equivalent to those at Penn State. Students are expected to have a minimum of two years of full-time work experience prior to admission.

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**Did You Know?**

- Penn State credits and degrees earned online are identical to those earned on campus.
- Penn State World Campus has enrolled students from all 50 states and all 7 continents.
- Our online courses involve frequent interactions between students and with instructors.
- Penn State’s turfgrass science program is one of the oldest and most respected programs in the country, offering flexible learning options for turfgrass professionals at almost any stage of their career.