The Master of Professional Studies in Turfgrass Management (MPS-TM) is a terminal master's degree program that emphasizes a systems approach to turfgrass management. The program balances theory and practice. Courses taught in MPS-TM use web-based lessons, quizzes, exams, and team projects and exercises to provide a balance between individualized study and interactive learning. Individuals who currently work as managers of turfgrass facilities, including golf courses and professional sports complexes, would benefit from this program.

Admission Requirements
Applicants apply for admission to the program via the Graduate School application for admission (http://gradschool.psu.edu/prospective-students/how-to-apply). Requirements listed here are in addition to Graduate Council policies listed under GCAC-300 Admissions (http://gradschool.psu.edu/graduate-education-policies).

Applicants must submit a letter of professional introduction in which they describe their professional experiences and education, delineate their career goals, and discuss how the MPS-TM program will enable them to meet their objectives. Applicants must also provide three letters of reference and recommendation. The best-qualified applicants will be accepted up to the number of spaces that are available for new students. Scores from Graduate Record Examination (GRE), or from a comparable substitute examination accepted by a graduate program are required for admission; however, exceptions may be considered on a case-by-case basis.

The language of instruction at Penn State is English. English proficiency test scores (TOEFL/IELTS) may be required for international applicants. See GCAC-305 Admission Requirements for International Students (http://gradschool.psu.edu/graduate-education-policies/gcac/gcac-300/gcac-305-admission-requirements-international-students) for more information.

Degree Requirements

Master of Professional Studies
Requirements listed here are in addition to Graduate Council policies listed under GCAC-700 Professional Degree Requirements (http://gradschool.psu.edu/graduate-education-policies). The MPS-TM program requires the completion of four core courses in which students learn to apply scientific concepts to fundamental problems encountered in the management of complex turfgrass ecosystems. Additionally, a capstone individual studies in turfgrass management course is a project that integrates theory and practice in addressing real problems encountered in turfgrass facility management.

The professional master's degree requires 30 credits including a final integrative project. All students complete the required MPS-TM core program of turfgrass courses.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>TURF 850</td>
<td>Turfgrass Physiology</td>
<td>3</td>
</tr>
<tr>
<td>AGRO 851</td>
<td>Applied Plant Population Biology</td>
<td>3</td>
</tr>
<tr>
<td>TURF 852</td>
<td>Turfgrass Health Management</td>
<td>3</td>
</tr>
<tr>
<td>TURF/PPATH 853</td>
<td>Interpreting Turfgrass Science Literature</td>
<td>3</td>
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Electives
In consultation with their adviser, students also take an additional 15 credits of elective coursework to focus on their particular interest within turfgrass facility management.

Culminating Experience
AGRO 596 | Individual Studies (Capstone Project)     | 3       |

Total Credits
30

An integrative project is required in which the student demonstrates the capability to integrate and apply concepts, principles, analytical techniques, and interpretation skills learned in the program to a real problem faced in turfgrass facility management. A total of 18 credits must be 500 or 800 level, with at least 6 credits of 500-level course work; this Graduate Council requirement is met through the required courses, the project, and at least one 500-level elective course.

Flexibility is a key principle of the design of this program. Each course will be offered once each academic year. Sequencing of courses is determined by the semester the student begins the program. Students and their adviser will develop a plan of study upon completion of the second course taken in the program or the end of the first year, whichever occurs sooner. Many students may take three or four courses per year while others may only take one or two. Because of this, the time to degree will average three years and one semester.

Transfer Credits
If students have successfully completed courses from another institution that are equivalent to the elective turfgrass courses (TURF 425, TURF 434, TURF 435, and TURF 436) with grades of B or better, these can be applied toward satisfying the MPS-TM degree requirements, subject to restrictions outlined in GCAC-309 Transfer Credit (http://gradschool.psu.edu/graduate-education-policies/gcac/gcac-309/transfer-credit).

Student Aid
World Campus students in graduate degree programs may be eligible for financial aid. Refer to the Tuition and Financial Aid section (http://www.worldcampus.psu.edu/tuition-and-financial-aid) of the World Campus website for more information.

Courses
Graduate courses carry numbers from 500 to 699 and 800 to 899. Advanced undergraduate courses numbered between 400 and 499 may be used to meet some graduate degree requirements when taken by graduate students. Courses below the 400 level may not. A graduate student may register for or audit these courses in order to make up deficiencies or to fill in gaps in previous education but not to meet requirements for an advanced degree.
Learning Outcomes

1. **KNOW:** Graduates will demonstrate a working knowledge of the core concepts and major scientific issues related to turfgrass science. Graduates will exhibit breadth and depth of understanding in their discipline via courses completed in the MPS program and through their final project.

2. **APPLY/CREATE:** Graduates will demonstrate the ability to apply scientific concepts and significant research findings to real-world problems. They will be able to integrate research findings and practical knowledge of turfgrass science and design appropriate methodologies to address problems in the field. The demonstration of these skills will include frequent essay exams where newly acquired concepts must be applied to a unique set of circumstances. This set of skills will also be demonstrated in the student’s final project which requires a broad analysis of a particular issue facing the industry.

3. **COMMUNICATE:** Graduates will able to inform the decision-making process by effectively communicating the application of particular scientific concepts, technical knowledge, and research findings. Graduates will be able to effectively convey this information to lay persons and peers in the discipline.

4. **THINK:** Graduates will be able to define, conceptualize and critically analyze a turfgrass management problem and possible solutions considering the scientific, economic, and political circumstances using knowledge and practice gained in the program.

5. **PROFESSIONAL PRACTICE:** Graduates of the program will demonstrate the ability to collaborate in a collegial manner and demonstrate high ethical standards, values, and best practices. This will be demonstrated through varying group projects and open discussions surrounding controversial issues in turfgrass science.

Contact

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