Applied Physical Science M.S.A.P.S. (Thesis)

Degree Requirements: 30 Credit Hours (Thesis)

Admission

Students are selected for the Master of Science in Applied Physical Science degree program on a competitive basis. Meeting minimum requirements does not guarantee admission.

Admission Requirements

Regular
1. B.S. or B.A. degree in chemistry, physics, or related degree from an appropriate regionally accredited college or university, or an equivalent degree from a recognized foreign college or university. Official TOEFL scores (not more than two years old) required for international students.
2. An overall minimum cumulative GPA of 2.75 on a 4.0 scale or at the discretion of the graduate admission committee.
3. Official GRE Report showing competitive subtest scores by the start of the first semester of graduate courses.
4. Two Letters of Recommendation from individuals familiar with the applicant’s potential to complete successful graduate work.
5. Applicant’s Statement of Purpose & Research Experience, which must address
   a. the student’s preparation and research experiences for graduate study,
   b. the student’s goals for the graduate program, potential concentration area, and possible advisor (for thesis option), and
   c. the student’s professional goals following completion of the M.S.A.P.S. program
6. The applicant must have the appropriate undergraduate preparation for the area of concentration. This requires meeting the general M.S.A.P.S. requirements and the prerequisites listed for the particular concentration area.

Provisional

Applicants who do not meet the admission requirements may be admitted provisionally. To be converted to regular status, provisional students must take any appropriate undergraduate courses as recommended by the graduate committee and must earn a “B” or higher in their first nine (9) credits of coursework approved by the graduate director.

Non-Degree

Non-degree students are accepted on an individual basis as space is available. Applicants must have a minimum cumulative GPA of 2.75 on a 4.0 scale and submit a Statement of Purpose and Research Experience.

Grades

Students are required to maintain a cumulative GPA of at least 3.0 to remain in good academic standing and to be eligible to graduate. In the event the cumulative GPA falls below 3.0, the student will be placed on academic probation. Students have nine (9) credits to elevate the cumulative GPA to at least 3.0 or will be excluded from the program. Students earning grades of "F" will also be excluded from the program.

Program Concentrations

The Master of Science in Applied Physical Science degree Thesis program provides concentrations in Environmental Science, Pharmaceutical Science, or Materials and Coatings Science.

A maximum of twelve (12) credits at the 5000 level are allowed for the Master of Science in Applied Physical Science degree.

Environmental Science Concentration

Core Requirements

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<thead>
<tr>
<th>Credit Hours</th>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>30</td>
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Concentration Requirements

<table>
<thead>
<tr>
<th>Credit Hours</th>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>3</td>
<td>CHEM 5110G</td>
<td>Environmental Chemistry</td>
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Concentration Elective courses at or above the 5000 level - as contracted with the faculty advisor and degree coordinator

Total Credit Hours

30

Pharmaceutical Science Concentration

Core Requirements

<table>
<thead>
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<th>Credit Hours</th>
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<tr>
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Concentration Requirements

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<thead>
<tr>
<th>Credit Hours</th>
<th>Course Code</th>
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<tbody>
<tr>
<td>3</td>
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Concentration Elective courses at or above the 5000 level - as contracted with the faculty advisor and degree coordinator

Total Credit Hours

30
Material and Coatings Science Concentration

Core Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>CHEM 6130</td>
<td>Industrial Science</td>
</tr>
<tr>
<td>CHEM 6230</td>
<td>Scientific Inquiry and Ethics</td>
</tr>
<tr>
<td>CHEM 7630</td>
<td>Graduate Seminar</td>
</tr>
<tr>
<td>or PHYS 7630</td>
<td>Graduate Seminar</td>
</tr>
<tr>
<td>CHEM 7999</td>
<td>Thesis</td>
</tr>
<tr>
<td>or PHYS 7999</td>
<td>Thesis</td>
</tr>
<tr>
<td>PUBH 6541</td>
<td>Biostatistics</td>
</tr>
<tr>
<td>or STAT 5531G</td>
<td>Statistical Methods I</td>
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</tbody>
</table>

Concentration Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>CHEM/PHYS 6131</td>
<td>Solid State Materials</td>
</tr>
</tbody>
</table>

Concentration Elective courses at or above the 5000 level - as contracted with the faculty advisor and degree coordinator

Total Credit Hours: 30

Thesis

Each Candidate for the Master of Science in Applied Physical Science degree, thesis option, must complete a thesis on a subject approved by the graduate thesis committee. The major professor supervises the research, directs the writing of the thesis, and approves the thesis in its final form. Prior to the final approval, the thesis is read by the thesis committee. One member, termed the second reader, has the responsibility for an intensive and rigorous criticism of the thesis, and a third member of the thesis committee has the responsibility of an "editorial reader." Both second and third readers must report all comments to the major professor. The thesis must be defended in an oral examination before the graduate committee prior to final approval and sign-off.

The style and format for the completed thesis shall follow that prescribed by the Director for the Master of Science in Applied Physical Science degree. Procedural steps in the preparation of the thesis are as follows:

- The prospectus for the thesis shall be submitted to the major professor and thesis committee for approval.
- The thesis must be electronically submitted to the ETD site for format check by the ETD format check submission deadline as stated in the University Calendar.
- The final corrected thesis must be electronically submitted to the ETD site by the ETD format check submission deadline as stated in the University Calendar. The final document must be electronically approved by the Thesis Committee.


Accelerated Bachelor’s to Master’s in Applied Physical Science

Admission:

Students are selected for the Master of Science in Applied Physical Science degree program on a competitive basis. Meeting the minimum requirements does not guarantee admission.

Admission Requirements:

1. Student must complete a minimum of 24 semester credit hours in their major courses for either a biology, biochemistry, chemistry, physics or geology degree.
2. Student must have a minimum GPA of 3.25 overall in their major courses or at the discretion of the graduate admissions committee.
3. Two letters of recommendation from individuals familiar with the applicant’s potential to complete successful graduate work.

Program Requirements:

In accordance with SACSCOC requirements, 120 unique credit hours are required in a Bachelors degree program, and at least 30 unique credit hours are required in a Masters degree program. The MSAPS-APS-ABM program combines 124 hours from the BS Biology, BS Biochemistry, BS Chemistry, BS Geology or BS Physics program and 30 hours from the MSAPS-APS program, exceeding the required 150 unique hours between undergraduate and graduate degree programs by 4 hours. The Jack N. Averitt College of Graduate Studies Handbook for Program Directors and Graduate Advisors permits a maximum of 9 shared credit hours between the undergraduate and graduate degree programs. Therefore, MSAPS-APS-ABM students may share a maximum of 4 credit hours of Masters level courses (5000G-8000) in satisfying the requirements of both degree programs.

Grades:

Students are required to maintain a cumulative GPA of at least a 3.0 to remain in good academic standing and to be eligible to graduate. In the event the cumulative GPA falls below 3.0, the student will be placed on academic probation. Students will have nine (9) credits to elevate the cumulative GPA to at least 3.0 or will be excluded from the program. Students earning grades of “F” will also be excluded from the program.