Physics and Music with Concentration in Music Composition and Technology, BS

The combined major in physics and music provides a strong foundation in classical and modern physics, including studies of the various physical phenomena including electromagnetism, dynamics, building blocks of matter, energy, and radiation. It also provides students with a solid background in composition for acoustic and electronic instruments and for combined and/or interactive live and digital sources. The combined major allows students to learn how physical principles influence sound production and propagation.

Program Requirements
Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

University-Wide Requirements
All undergraduate students are required to complete the University-Wide Requirements (http://catalog.northeastern.edu/undergraduate/university-academics/university-wide-requirements).

NUpath Requirements
All undergraduate students are required to complete the NUpath Requirements (http://catalog.northeastern.edu/undergraduate/university-academics/nupath).

Physics Major Requirements

**Introductory Physics**
- PHYS 1161 and PHYS 1162
- PHYS 1165 and PHYS 1166

**Intermediate Physics**
- PHYS 2303
- PHYS 2305
- PHYS 2371 and PHYS 2372

**Advanced Physics**
- PHYS 3600
- PHYS 3602
- PHYS 5115
- PHYS 5318

Music Requirements

**Music Theory and Composition**
- MUSC 1001
- MUSC 1201
- MUSC 1202
- MUSC 3541
- MUST 1301

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>MUSC 1001</td>
<td>Music in Everyday Life</td>
<td>4</td>
</tr>
<tr>
<td>MUSC 2315</td>
<td>History of Electronic Music</td>
<td>4</td>
</tr>
<tr>
<td>MUSC 2101</td>
<td>Black Popular Music</td>
<td>4</td>
</tr>
<tr>
<td>MUSC 2308</td>
<td>Principles of Music Literature</td>
<td>4</td>
</tr>
<tr>
<td>MUSC 2310</td>
<td>Popular Music Since 1945</td>
<td>4</td>
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<tr>
<td>MUSC 2316</td>
<td>Historical Traditions: History of the Music Industry</td>
<td>4</td>
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<tr>
<td>MUSC 2320</td>
<td>40,000 Years of Music Technology</td>
<td>4</td>
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<tr>
<td>MUSC 3560</td>
<td>Historical Traditions: Music since 1900</td>
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<tr>
<td>MUST 3401</td>
<td>Hip Hop in the Music Industry</td>
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Music Technology
- MUST 1220
- MUST 2431
- MUSC 2350

**Music Technology Electives**
Complete two courses from the following:
- MUSC 5101
- MUST 3540
- MUST 4520
- MUST 4610

**Music Technology Capstone**
- MUST 4611

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<tr>
<td>MUST 1220</td>
<td>Introduction to Music Technology</td>
<td>4</td>
</tr>
<tr>
<td>MUST 2431</td>
<td>Computer Music Fundamentals</td>
<td>4</td>
</tr>
<tr>
<td>MUSC 2350</td>
<td>Acoustics and Psychoacoustics of Music</td>
<td>4</td>
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Physics/Music Integrative Requirements

**Integrative Course Requirements**
- MUST 1220
- MUST 3421

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<tr>
<td>MUST 1220</td>
<td>Introduction to Music Technology</td>
<td>4</td>
</tr>
<tr>
<td>MUST 3421</td>
<td>Digital Audio Processing</td>
<td>4</td>
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Physics and Music Combined-Major Credit Requirement
Complete 94 semester hours in the major.

Program Requirement
128 total semester hours required