# Bachelor of Science in Sound Engineering

Silent Advisor 2021 – 2022

## SMTD Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theory 139 (Aural I) and 149 (Written I)</td>
<td>3 total</td>
</tr>
<tr>
<td>Theory 140 (Aural II) and 150 (Written II) OR</td>
<td>3 total</td>
</tr>
<tr>
<td>PAT 150 (Experiential Theory)¹</td>
<td></td>
</tr>
</tbody>
</table>

Choose one of the following combinations:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theory 239 (Aural III), 249 (Written III),</td>
<td>6 total</td>
</tr>
<tr>
<td>240 (Aural IV) and 250 (Written IV)</td>
<td></td>
</tr>
<tr>
<td>Jazz 220 (Basic Musicianship I) and</td>
<td>6 total</td>
</tr>
<tr>
<td>221 (Basic Musicianship II)</td>
<td></td>
</tr>
<tr>
<td>6 credits chosen from the following:</td>
<td>6 total</td>
</tr>
<tr>
<td>Jazz 460 (Intro Improv)</td>
<td></td>
</tr>
<tr>
<td>Jazz 466 (Improv I)</td>
<td></td>
</tr>
<tr>
<td>Jazz 467 (Improv II)</td>
<td></td>
</tr>
<tr>
<td>Jazz 468 (Jazz Comp I)</td>
<td></td>
</tr>
<tr>
<td>Musicology 465 (Music in Africa)</td>
<td></td>
</tr>
<tr>
<td>WGS 354 (Music, Race, and Identity)</td>
<td></td>
</tr>
<tr>
<td>RCMUS 258 (Afro-Cuban Drumming)</td>
<td></td>
</tr>
<tr>
<td>RCMUS 321 (Chinese Music Ens)</td>
<td></td>
</tr>
<tr>
<td>OR other courses with a focus on Race and</td>
<td></td>
</tr>
<tr>
<td>Ethnicity in the Performing Arts</td>
<td></td>
</tr>
</tbody>
</table>

2 courses in Musicology                           | 4-6     |

Piano:                                            |         |
| 111                                              | 2       |
| 112                                              | 2       |

## PAT Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAT:</td>
<td></td>
</tr>
<tr>
<td>Seminar in Media Arts</td>
<td>101</td>
</tr>
<tr>
<td>Acoustics and Psychoacoustics</td>
<td>102</td>
</tr>
<tr>
<td>Intro to Computer Music</td>
<td>201</td>
</tr>
<tr>
<td>Computer Music Programming and Arranging</td>
<td>202</td>
</tr>
<tr>
<td>Creative Coding for Music</td>
<td>204</td>
</tr>
<tr>
<td>Sound Reinforcement</td>
<td>280</td>
</tr>
<tr>
<td>Sound Recording and Production I</td>
<td>331</td>
</tr>
<tr>
<td>Sound Recording and Production II</td>
<td>332</td>
</tr>
<tr>
<td>Sound For Theatre</td>
<td>380</td>
</tr>
<tr>
<td>PAT Seminar (elected each term)</td>
<td>400</td>
</tr>
<tr>
<td>Technical Ear Training and Critical Listening</td>
<td>422</td>
</tr>
<tr>
<td>Contemporary Practices in Studio Production I</td>
<td>431</td>
</tr>
<tr>
<td>Contemporary Practices in Studio Production I</td>
<td>432</td>
</tr>
</tbody>
</table>

Senior Thesis (PAT 490) or EECS 452 (Design Lab)  |         |

## Non-SMTD Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 124, 125 (College Writing), or equivalent</td>
<td>4</td>
</tr>
<tr>
<td>English 225 (Academic Argumentation) or Upper Level Writing course approved by Sweetland Writing Center</td>
<td>3-4</td>
</tr>
</tbody>
</table>

## Engineering Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math:</td>
<td></td>
</tr>
<tr>
<td>Calculus I</td>
<td>115</td>
</tr>
<tr>
<td>Calculus II</td>
<td>116</td>
</tr>
<tr>
<td>Intro Differential Equations</td>
<td>216</td>
</tr>
<tr>
<td>Physics I</td>
<td>140</td>
</tr>
<tr>
<td>Elementary Lab I</td>
<td>141</td>
</tr>
<tr>
<td>General Physics/ Honors</td>
<td>240/260</td>
</tr>
<tr>
<td>Elementary Lab II</td>
<td>241</td>
</tr>
<tr>
<td>EECS: Intro Electronic Circuits</td>
<td>215</td>
</tr>
<tr>
<td>Intro Signals and Systems</td>
<td>216</td>
</tr>
<tr>
<td>Programming and Data Structures</td>
<td>280</td>
</tr>
<tr>
<td>Digital Signal Processing &amp; Analysis</td>
<td>351</td>
</tr>
<tr>
<td>Digital Signal Processing Design Lab</td>
<td>452</td>
</tr>
</tbody>
</table>

Engineering 101 (Intro Programming) or one Computer Programming course to be chosen in consultation with PAT or EECS Advisor |

Minimum Total Credits Required: 120

¹Students who elect PAT 150 as a substitution in the second semester of their first year will not be eligible to take Theory 239, 249, 240, and 250. However, they will be eligible to take Jazz 220 and 221.
This term layout is provided as a guideline only. The sequence of elections and credits may vary based on individual circumstances. For more specific information, see an Advisor.

<table>
<thead>
<tr>
<th>Course Elections</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAT 400 (Seminar)</td>
<td>0.5</td>
</tr>
<tr>
<td>Theory 139 (Aural I)</td>
<td>1</td>
</tr>
<tr>
<td>Theory 149 (Written I)</td>
<td>2</td>
</tr>
<tr>
<td>Piano 111</td>
<td>2</td>
</tr>
<tr>
<td>PAT 101 (Seminar)</td>
<td>3</td>
</tr>
<tr>
<td>PAT 201 (Intro)</td>
<td>3</td>
</tr>
<tr>
<td>English 124/125/equiv  (College Writing)</td>
<td>4</td>
</tr>
<tr>
<td><strong>Credit Total</strong></td>
<td><strong>15.5</strong></td>
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**SECOND YEAR**

<table>
<thead>
<tr>
<th>Course Elections</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAT 400 (Seminar)</td>
<td>0.5</td>
</tr>
<tr>
<td>Theory 239 (Aural III) and 249 (Written II) OR Jazz 220 (Basic Musicianship I) OR listed elective</td>
<td>3</td>
</tr>
<tr>
<td>PAT 331 (Sound Recording I)</td>
<td>3</td>
</tr>
<tr>
<td>Math 115 (Calculus I)</td>
<td>4</td>
</tr>
<tr>
<td>Computer Programming</td>
<td>4</td>
</tr>
<tr>
<td><strong>Credit Total</strong></td>
<td><strong>14.5</strong></td>
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</table>

**THIRD YEAR**

<table>
<thead>
<tr>
<th>Course Elections</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAT 400 (Seminar)</td>
<td>0.5</td>
</tr>
<tr>
<td>Musicology Elective</td>
<td>2-3</td>
</tr>
<tr>
<td>PAT 280 (Sound Reinforcement)</td>
<td>1</td>
</tr>
<tr>
<td>Math 216 (Differential Equations)</td>
<td>4</td>
</tr>
<tr>
<td>Physics 240 (General Physics)</td>
<td>4</td>
</tr>
<tr>
<td>Physics 241 (Lab II)</td>
<td>1</td>
</tr>
<tr>
<td>EECS 215 (Intro Circuits)</td>
<td>4</td>
</tr>
<tr>
<td><strong>Credit Total</strong></td>
<td><strong>16.5-17.5</strong></td>
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**FOURTH YEAR**

<table>
<thead>
<tr>
<th>Course Elections</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAT 400 (Seminar)</td>
<td>0.5</td>
</tr>
<tr>
<td>PAT 422 (Ear Training)</td>
<td>3</td>
</tr>
<tr>
<td>PAT 431 (Contemporary Practices I)</td>
<td>3</td>
</tr>
<tr>
<td>PAT 380 (Sound for Theatre)</td>
<td>2</td>
</tr>
<tr>
<td>EECS 351 (Digital Processing)</td>
<td>4</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td><strong>Credit Total</strong></td>
<td><strong>15.5</strong></td>
</tr>
</tbody>
</table>

**WINTER TERM**

<table>
<thead>
<tr>
<th>Course Elections</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAT 400 (Seminar)</td>
<td>0.5</td>
</tr>
<tr>
<td>Theory 140 (Aural II) and 150 (Written II) OR PAT 150 Experiential Theory</td>
<td>3</td>
</tr>
<tr>
<td>Piano 112</td>
<td>2</td>
</tr>
<tr>
<td>PAT 102 (Acoustics)</td>
<td>3</td>
</tr>
<tr>
<td>PAT 202 (Computer Music)</td>
<td>3</td>
</tr>
<tr>
<td>PAT 204 (Creative Coding for Music)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Credit Total</strong></td>
<td><strong>14.5</strong></td>
</tr>
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<tbody>
<tr>
<td>PAT 400 (Seminar)</td>
<td>0.5</td>
</tr>
<tr>
<td>Theory 240 (Aural IV) and 250 (Written IV) OR Jazz 221 (Basic Musicianship II) OR listed elective</td>
<td>3</td>
</tr>
<tr>
<td>PAT 332 (Sound Recording II)</td>
<td>3</td>
</tr>
<tr>
<td>Math 116 (Calculus II)</td>
<td>4</td>
</tr>
<tr>
<td>Physics 140 (Physics I)</td>
<td>4</td>
</tr>
<tr>
<td>Physics 141 (Lab I)</td>
<td>1</td>
</tr>
<tr>
<td><strong>Credit Total</strong></td>
<td><strong>15.5</strong></td>
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<tr>
<td>Musicology Elective</td>
<td>2-3</td>
</tr>
<tr>
<td>EECS 216 (Signals &amp; Systems)</td>
<td>4</td>
</tr>
<tr>
<td>EECS 280 (Prog and Data Structures)</td>
<td>4</td>
</tr>
<tr>
<td>Upper Level Writing</td>
<td>4</td>
</tr>
<tr>
<td><strong>Credit Total</strong></td>
<td><strong>14.5-15.5</strong></td>
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<tr>
<td>PAT 400 (Seminar)</td>
<td>0.5</td>
</tr>
<tr>
<td>PAT 432 (Contemporary Practices II)</td>
<td>3</td>
</tr>
<tr>
<td>PAT 490 (Senior Thesis)</td>
<td>3</td>
</tr>
<tr>
<td>EECS 452 (Digital Processing)</td>
<td>4</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td><strong>Credit Total</strong></td>
<td><strong>13.5</strong></td>
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</tbody>
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<thead>
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<tbody>
<tr>
<td>PAT 400 (Seminar)</td>
<td>0.5</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

**Credit Total** | **13.5**|