**2015 - 2016 Old Dominion University Catalog**  
**Bachelor of Science in Physics**  
*(Concentration E: Dual Degree Program with MBA)*

Sample four year curriculum with a suggested ordering of courses. Students may re-order as needed. Consult with Advisor.

<table>
<thead>
<tr>
<th>YEAR 1 - FRESHMAN (33 CREDITS)</th>
<th>YEAR 2 - SOPHOMORE (31 CREDITS)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FALL SEMESTER (17 credits)</strong></td>
<td><strong>FALL SEMESTER (14 credits)</strong></td>
</tr>
<tr>
<td>General Education and Major Coursework:</td>
<td>General Education and Major Coursework:</td>
</tr>
<tr>
<td>MATH 211</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 110C</td>
<td>3</td>
</tr>
<tr>
<td>Language and Culture I (May be waived, see catalog for details)</td>
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</tr>
<tr>
<td>CS 150</td>
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</tr>
<tr>
<td>Information Literacy and Research: CS 120G or CS 121G</td>
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<tr>
<td><strong>SPRING SEMESTER (16 credits)</strong></td>
<td><strong>SPRING SEMESTER (17 credits)</strong></td>
</tr>
<tr>
<td>General Education and Major Coursework:</td>
<td>General Education and Major Coursework:</td>
</tr>
<tr>
<td>CHEM 121N/122N*</td>
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</tr>
<tr>
<td>Literature</td>
<td>3</td>
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<tr>
<td>Philosophy and Ethics</td>
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<tr>
<td>PHYS 231N</td>
<td>4</td>
</tr>
<tr>
<td><strong>YEAR 3 - JUNIOR (32 CREDITS)</strong></td>
<td><strong>Impact of Technology</strong></td>
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<tr>
<td><strong>YEAR 4 - SENIOR (28 CREDITS)</strong></td>
<td><strong>YEAR 5 - (26 CREDITS)</strong></td>
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<tr>
<td><strong>FALL SEMESTER (16 credits)</strong></td>
<td><strong>FALL SEMESTER (14 credits)</strong></td>
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<tr>
<td>Major Coursework:</td>
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<tr>
<td>MATH 307</td>
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<td>MATH 312</td>
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<td>PHYS 319</td>
<td>3</td>
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<tr>
<td>PHYS 323</td>
<td>3</td>
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<tr>
<td>PHYS 303</td>
<td>3</td>
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<tr>
<td>MBA 600</td>
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<tr>
<td><strong>SPRING SEMESTER (16 credits)</strong></td>
<td><strong>SPRING SEMESTER (12 credits)</strong></td>
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<tr>
<td>Major Coursework:</td>
<td>Major Coursework:</td>
</tr>
<tr>
<td>PHYS 452</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 499W or 489W &amp; 490W</td>
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<tr>
<td>PHYS 420, 453 or 456</td>
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<td>MBA 601</td>
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<tr>
<td>MBA course**</td>
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</tbody>
</table>

*CHEM 137N/CHEM 138N may be taken instead of CHEM 121N/CHEM 122N and CHEM 123N/124N.*

**Please consult the catalog and your ODU advisor for MBA coursework.**

Language and Culture may be waived, see ODU catalog for exemptions.

The Upper Division General Education is satisfied by M.B.A. Pre-Core and Core Curriculum. Students must maintain a 3.0 GPA in these courses to continue in the program.

Concentration E is a Bachelor of Science in physics and Master of Business Administration dual degree program. After students have satisfactorily completed their undergraduate requirements, they complete the remaining requirements in the M.B.A. program. Students must earn a minimum of 150 credits (120 for the undergraduate degree and 30 for the graduate degree).

Requirements for graduation include a minimum cumulative grade point average of 2.00 overall and in the major, a grade of C or better in all courses required for the major, including prerequisite courses, 120 credit hours, which must include both a minimum of 30 credit hours overall and 12 credit hours in upper-level courses in the major program from Old Dominion University, completion of ENGL 110C, ENGL 211C or 221C or 231C, and a writing intensive (W) course in the major with a grade of C or better, and completion of Senior Assessment.