9. Special Consideration

**Dwight Look College of Engineering**
Artie McFerrin Department of Chemical Engineering
B.S. in Chemical Engineering
Request for the following tracks:
- General Track
- Biochemical and Biomolecular Track
- Materials Track
- Process Systems Engineering Track
- Environmental and Sustainability Track
TO: Dr. Robert Knight, Chair  
University Curriculum Committee

THROUGH: Dr. Jo Howze, Associate Dean for Academic Programs  
Dwight Look College of Engineering

Dr. Michael Pishko, Department Head  
Artie McFerrin Department of Chemical Engineering

FROM: Dr. Mark Holtzapple  
Associate Head for Undergraduate Programs

DATE: October 20, 2009

SUBJECT: Additional Change in Curriculum

The Artie McFerrin Department of Chemical Engineering Undergraduate Curriculum Committee is requesting the following changes in the Chemical Engineering curriculum to be published in Catalog 133 (201031) and effective for the Class of 2014.

Addition of recognized ‘tracks’ within the curriculum:

General Track
Biochemical & Biomolecular Track
Materials Track
Process Systems Engineering Track
Environmental & Sustainability Track

The addition of tracks will offer students an opportunity to extend and apply the fundamentals developed in the basic courses toward more focused areas of specialization. A prescribed five course sequence consisting of three foundation courses and two specialized electives has been developed. Attached is a copy of the tracks as will be listed pending approval in the catalog. The addition of tracks will not affect the number of hours for the degree.
# Proposed Tracks

**Artie McFerrin Department of Chemical Engineering**

<table>
<thead>
<tr>
<th>General Track</th>
<th>Biochemical &amp; Biomolecular</th>
<th>Materials</th>
<th>Process Systems Engineering</th>
<th>Environmental &amp; Sustainability</th>
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</thead>
<tbody>
<tr>
<td><strong>CHEM 322</strong></td>
<td><strong>BICH 410</strong></td>
<td><strong>CHEM 322</strong></td>
<td><strong>CHEM 322</strong></td>
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<tr>
<td>Physical Chemistry for Engineers</td>
<td>Comprehensive Biochemistry</td>
<td>Physical Chemistry for Engineers</td>
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<td><strong>CHEM 325, 326</strong></td>
<td><strong>BIOL 213</strong></td>
<td><strong>CHEM 325, 326</strong></td>
<td><strong>CHEM 325, 326</strong></td>
<td><strong>CHEM 325, 326</strong></td>
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<tr>
<td>Physical Chemistry Labs I, II</td>
<td>Molecular Cell Biology</td>
<td>Physical Chemistry Labs I, II</td>
<td>Physical Chemistry Labs I, II</td>
<td>Physical Chemistry Labs I, II</td>
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<tr>
<td><strong>CHEM 316, 318</strong></td>
<td><strong>Select one from</strong></td>
<td><strong>CHEM 466</strong></td>
<td><strong>MATH 304</strong></td>
<td><strong>CHEM 383</strong></td>
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<tr>
<td>Quantitative Analysis Lecture and Lab</td>
<td>BIOL 351 Fundamentals of Microbiology BIOL 413 Cell Biology</td>
<td>Polymer Chemistry</td>
<td>Linear Algebra</td>
<td>Chemistry of Environmental Pollution</td>
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<tr>
<td>**CHEN Elective **</td>
<td><strong>CHEN 471</strong></td>
<td><strong>CHEN 451</strong></td>
<td><strong>CHEN Elective</strong></td>
<td><strong>CHEN 459</strong></td>
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<tr>
<td>Introduction to Biochemical Engineering</td>
<td>Introduction to Polymer Engineering</td>
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<td>Gas and Petroleum Processing</td>
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</tbody>
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* Electives are to be selected based on track approved list from Academic Advisor