**Program:** Biomedical/Bioengineering  
**CIP:** 14.0501  
**Track:** 1  
**Program Length:** 120 Cr. Hrs.  

- **Offered At:**  
  - USF*  
  - FIU  
  - FGCU  
  - FAMU, FSU  
  - UF*  

Revised 9/1/2011  
Technical course addition 10/23/2013  
REVISED 10/28/15  
Technical revision 7/6/2018  
Revised 10/24/2018  
Technical 12/20/2018  
Technical change 6/13/2019  
Technical 6/19/2019  
Technical 9/23/2019  
Technical 9/24/2019

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### LOWER LEVEL COURSES

<table>
<thead>
<tr>
<th>Cr. Hrs.</th>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>4</td>
<td>MACX311</td>
<td>Calculus I with Analytical Geometry</td>
</tr>
<tr>
<td>4</td>
<td>MACX312</td>
<td>Calculus II with Analytical Geometry</td>
</tr>
<tr>
<td>4</td>
<td>MACX313</td>
<td>Calculus III with Analytical Geometry</td>
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<tr>
<td>4</td>
<td>MACX281</td>
<td>Calculus I with Analytical Geometry</td>
</tr>
<tr>
<td>4</td>
<td>MACX282</td>
<td>Calculus II with Analytical Geometry</td>
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<tr>
<td>4</td>
<td>MACX283</td>
<td>Calculus III with Analytical Geometry</td>
</tr>
<tr>
<td>3</td>
<td>MAPX302</td>
<td>Differential Equations</td>
</tr>
<tr>
<td>3</td>
<td>MAPX305</td>
<td>Different Equations for Engineers</td>
</tr>
<tr>
<td>3</td>
<td>ECHX301</td>
<td>Intro to Process Analysis and Design</td>
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</table>

**Natural Sciences:**

- **Chemistry I & lab**  
  - CHMX045C  
  - Take both courses: CHMX045/045L  
  - CHMX046/046L  
  - CHSX440C  
  - Take both courses: CHSX440/X440L  
  - PHYX048C  
  - Take all of the following: PHYX048  
  - Select from the following: PHYX048L  
  - PHYX064L  
  - PHYX049C  
  - Take all of the following: PHYX049  
  - Select from the following: PHYX049L  
  - PHYX064L  
  - CHMX046/046L  
  - Take both courses: CHMX046/046L  
  - CHMX048/048L  
  - CHMX050C  
  - BSCX010C  
  - Take the following: BSCX010  
  - Select from the following: BSCX010L  
  - BSCX044L  
  - CHMX210C  
  - Take both: CHMX210/210L  

(1) UF requires CHMX217 or both CHMX210 and CHMX211.  
* Limited Access.  

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*Florida Center for Advising and Academic Support - Common Prerequisites 2019 - 2020*