### LOWER LEVEL COURSES

<table>
<thead>
<tr>
<th>Cr. Hrs.</th>
<th>COPXXXXX</th>
<th>Gen.Ed**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intro Programming in C, C++, JAVA or equivalent Language</td>
<td>MAPX302</td>
<td>3 Differential Equations</td>
</tr>
</tbody>
</table>

- Select from the following:
  - MAPX311 | 4
  - MACX281 | 4
  - MACX312 | 4
  - MACX282 | 4

- Select from the following:
  - CHMX045C | 4
  - Take both courses:
    - CHMX045/045L | 4
  - CHMX440C | 4

- Select from the following:
  - PHYX048C | 5
  - Take both courses:
    - PHYX048/048L | 5

- Select from the following:
  - PHYX049C | 5
  - Take both courses:
    - PHYX049/049L | 5

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**NOTE:** At USF, these are the common prerequisites for Computer Engineering EN ECP. The USC Computer Science EN BCS common prerequisites are found in 11.0101 Track 1. The Computer Information Systems EN EIF common prerequisites for USF are in 11.0401 Track 1.

**REVISED 10/19/05**

**REVISED 10/28/2009**

**REVISED 5/26/2010 to reflect previously approved changes.**

**Revised 10/23/2013 to add course mistakenly left off.**

Technical 12/12/2018