Suggested Course Plan for a UC Riverside Major in

Computer Engineering

(Catalog Year 2007)

**Fall Quarter**

- CS 010
  - C++ Programming I
- ENGL 001A
  - English Composition
- ENGR 001G*
  - Professional Dev & Mentoring
- MATH 009A
  - First Year Calculus

**Winter Quarter**

- First Year
  - ENGL 001B
    - English Composition
  - MATH 009B
    - First Year Calculus
  - PHYS 040A
    - Physics (Mechanics)
  - BREADTH
    - Humanities/Social Sciences

- CS 012
  - C++ Programming II
- ENGL 001C or ENGL 01SC*
  - English Composition
- MATH 009C
  - First Year Calculus
- PHYS 040B
  - Physics (Heat/Waves/Sound)

**Second Year**

- EE 001A/01LA
  - Engineering Circuit Analysis I
- MATH 046
  - Differential Equations
- PHYS 040C
  - Physics (Electricity/Magnetism)
- BREADTH
  - Humanities/Social Sciences

- EE 001B
  - Engineering Circuit Analysis II
- MATH 010A
  - Multivariable Calculus
- MATH/CS 011
  - Intro to Discrete Structures
- BREADTH
  - Humanities/Social Sciences

- CS 014
  - Data Structures
- CS 061
  - Machine Organization
- MATH/CS 111
  - Discrete Structures
- BREADTH
  - Humanities/Social Sciences

**Third Year**

- CS 141
  - Algorithms
- EE/CS 120A
  - Logic Design
- STAT 155
  - Probability, Statistics for Engr
- BREADTH
  - Humanities/Social Sciences

- CS/EE 120B
  - Embedded Systems
- EE 100A
  - Electronic Circuits
- EE 110A
  - Signals and Systems
- ENGR 180
  - Technical Communications

- CS 161/161L
  - Computer Architecture
- EE 100B
  - Electronic Circuits
- EE 110B
  - Signals and Systems
- BREADTH
  - Humanities/Social Sciences

**Fourth Year**

- CS 122A/EE 128
  - Micro Design/Instrumentation
- CS 153/160
  - Operating Systems/Concurrent Prog
- MATH 113
  - Linear Algebra
- BREADTH
  - Biological Science

- TECHNICAL ELECTIVE
  - **See Catalog List**
- TECHNICAL ELECTIVE
  - **See Catalog List**
- CHEM 001A/003
  - General Chemistry/Concepts of Chem

- TECHNICAL ELECTIVE
  - **See Catalog List**
- TECHNICAL ELECTIVE
  - **See Catalog List**
- TECHNICAL ELECTIVE
  - **See Catalog List**

**Notes**

Humanities/Social Sciences courses fulfill the breadth requirements specific to the College of Engineering and are available on the College of Engineering Student Academic Affairs website: [www.engr.ucr.edu/studentaffairs](http://www.engr.ucr.edu/studentaffairs).

*Optional, but recommended.

**Technical Electives are courses in Computer Engineering which explore specific topics. A list of Technical Electives is available on the College of Engineering Student Academic Affairs website: [www.engr.ucr.edu/studentaffairs](http://www.engr.ucr.edu/studentaffairs), and the UCR College Catalog website: [www.catalog.ucr.edu](http://www.catalog.ucr.edu).
Of the 5 total Technical Electives needed for Computer Engineering, at least 2 of them need to come from the same focus. The possibilities are listed below:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CLASSES</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CS 100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CS 121</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CS 122A</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CS 122B</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CS 130</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CS 133</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CS 150</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CS 152</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CS 153</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CS 160</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>CS 162</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>CS 164</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>CS 165</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>CS 166</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CS 168</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>CS 170</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CS 177</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CS 179</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>CS 180</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>CS 181</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CS 183</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CS 193</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>EE 105</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>EE 115</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EE 128</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>EE 132</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>EE 133*</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>EE 134*</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>EE 135*</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>EE 141</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>EE 144</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>EE 146</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>EE 150</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>EE 151</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>EE 152</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>EE 175A</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>EE 175B</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>