

# Bachelor of Science in Engineering Computer Concentration

<b>Course #</b>
Course Name
Prerequisite
Semester Taken

1st-fall	2nd	3rd	4th
1st-spring	2nd	3rd	4th

## Pre-Engineering (46 cr.)

<b>MATH 111</b> Calculus I (F,S)	<b>MATH 112</b> Calculus II (F,S) <i>MATH 111</i>	<b>MATH 211</b> Calculus III (F,S) <i>MATH 112</i>	<b>MATH 261</b> Linear Algebra (F,S) <i>MATH 112</i>	<b>MATH 308</b> Diff. Equations (F,S) <i>MATH 211</i>	<b>PHYS 211</b> Gen. Physics I (S) <i>MATH 111</i>	<b>PHYS 212</b> Gen. Physics II (F) <i>PHYS 211</i>
<b>CHEM 105</b> Gen. Chemistry I (F)	<b>ENGR 101</b> Engr. Graphics (J)	<b>ENGR 102</b> Intro. to Engr. (F)	<b>ENGR 201</b> Group Orien. (S) <i>ENGR 102</i>	<b>ENGR 231</b> Statics (F) <i>PHYS 211</i>	<b>ENGR 236</b> Circuits I (F,S) <i>MATH 111</i>	<b>ENGR 254</b> Materials Engr. (S) <i>MATH 211/OPI</i>

## Upper Division Engineering (14 cr.)

<b>ENGR 288</b> Project I (F) <i>ENGR 201</i>	<b>ENGR 290</b> Engr. Economics (J) <i>UD Standing</i>	<b>ENGR 301</b> Seminar I (F,S) <i>Adm. to Major</i>	<b>ENGR 302</b> Seminar II (F,S) <i>ENGR 301</i>	<b>ENGR 366</b> Control Systems (F) <i>MATH 270 or 308</i>	<b>ENGR 388</b> Project II (S) <i>ENGR 288</i>	<b>ENGR 488</b> Project III (F) <i>ENGR 388</i>
<b>ENGR 489</b> Project IV (S) <i>ENGR 488</i>						

## Computer Concentration (25-26 cr.)

<b>CIS 181</b> Comp.Prog. I (F,S)	<b>CIS 284</b> Comp. Prog. II (S) <i>CIS 181</i>	<b>CIS 384</b> Ele. Comp. Sys. (F) <i>CIS 284</i>	<b>CIS 385</b> Data Struct & Algor (F) <i>CIS 284</i>	<b>ENGR 242</b> Exp. Methods (F,S) <i>PHYS 211</i>	<b>ENGR 336</b> Circuits II <i>ENGR 236</i>	<b>ENGR 340</b> Analog Electronics (F) <i>ENGR 236</i>
<b>ENGR 342</b> Microprocessor (S) <i>ENGR 336</i>	<b>ENGR/CISxxx</b> Elective <i>Varies</i>					

## General Education (42 cr.)

<b>IDFY 101</b> First Year Seminar	Oral Communication	<b>IDCR 151</b> Created & Called	Social Sci./History	History	Literature	<b>PHED 101</b> Intro. to Wellness
Physical Fitness	Philosophy and Religion	Language I	Language II	Non-West./Cross Cult.	Bible	Christian Beliefs
Ethics/W.View/Pluralism	Writing Enriched					

### Computer Concentration Electives:

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|-----------------------------|---------------------------------------|--------------------------------|
| CIS 332 Database Concepts   | CIS 432 Database Applications         | ENGR 364 Electrical Devices    |
| CIS 415 Data Communications | CIS 482 Org. of Programming Languages | ENGR 365 Linear Systems        |
| CIS 416 Operating Systems   | CIS 487 Interactive 3D Graphics       | ENGR 367 Electromagnetics      |
|                             |                                       | ENGR 369 Communication Systems |