

# CIVIL ENGINEERING (BSCE - 131 hours)

Last updated:  
6/7/2016

Name: \_\_\_\_\_ USF ID: \_\_\_\_\_

## GENERAL EDUCATION & EXIT REQUIREMENTS (27 HOURS)

<p style="text-align: center;"><b>ENGLISH (9 hrs)</b></p> <p>___ ENC1101 (3) Composition I</p> <p>___</p> <p>___ ENC1102 (3) Composition II</p> <p>___ ENC 3246 (3) Communications for Engineers (Exit L&amp;W)</p>	<p style="text-align: center;"><b>FKL SOCIAL &amp; SCIENCE (3 hrs)</b></p> <p>___ _____ ( ) _____</p> <p style="text-align: center;"><b>FKL SOCIAL &amp; BEHAVIORAL (3 hrs)</b></p> <p>___ _____ ( ) _____</p> <p style="text-align: center;"><b>FKL HUMANITIES (3 hrs)</b></p> <p>___ _____ ( ) _____</p> <p>___ _____ ( ) _____</p>	<p style="text-align: center;"><b>FKL FINE ARTS (3 hrs)</b></p> <p>___ _____ ( ) _____</p> <p style="text-align: center;"><b>FKL HCDGC (3 hrs)</b></p> <p>___ _____ ( ) _____</p>
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## MATHEMATICS AND SCIENCE (33 HOURS)

<p>___ MAC 2281 (4) Engr. Calculus I</p> <p>___ MAC 2282 (4) Engr Calculus II</p> <p>___ MAC 2283 (4) Engr Calculus III</p> <p>___ MAP 2302 (3) Diff Equations**</p>	<p>___ CHM 2045 (3) Gen Chem I***</p> <p>___ CHM 2045L (1) Chem Lab</p> <p>___ GLY 3850 (3) Geology for Engineers</p> <p>___ EGN 3443 (3) Eng Statistics I</p>	<p>___ PHY 2048 (3) Physics w/ Calculus I &amp; 2048L (1) &amp; Lab</p> <p>___ PHY 2049 (3) Physics w/ Calculus II &amp; 2049L (1) &amp; Lab</p>
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## ENGINEERING CORE (35 HOURS)

<p>___ EGN 1113 (3) Intro to Design Graphics</p> <p>___ EGN 3000 (1) Foundations of Engineering *</p> <p>___ EGN 3311 (3) Statics</p> <p>___ EGN 4453 (3) Numerical &amp; Computer Tools I</p> <p>___ EGN 4454 (3) Numerical &amp; Computer Tools II</p>	<p>___ EGN 3321 (3) Dynamics</p> <p>___ EGN 3331 (3) Mechanics of Materials</p> <p>___ EGN 3331L (1) MoM/Materials Lab</p> <p>___ EGN 3343 (3) Thermodynamics I</p>	<p>___ EGN 3353C (3) Basic Fluid Mechanics</p> <p>___ EGN 3365 (3) Materials Engineering I</p> <p>___ EGN 3373 (3) Intro to Electrical Sys I</p> <p>___ EGN 3615 (3) Engineering Economy I</p>
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## SPECIALIZATION (36 HOURS) FOR BSCE

<p>___ ENV 4004L (1) Environmental/Water Lab</p> <p>___ CES 3102 (3) Structures I</p> <p>___ CEG 4011 (3) Geotech I</p> <p>___ CEG 4011L (1) Geotech/Trans Lab</p> <p>___ CWR 4202 (3) Hydraulics</p>	<p style="text-align: center;"><b>CONCENTRATION COURSES</b></p> <p>___ _____ (3) _____</p> <p>___ _____ (3) _____</p> <p>___ _____ (3) _____</p> <p>___ _____ (3) _____</p> <p>___ _____ (3) _____</p>	<p>___ TTE 4004 (3) Transportation Engineering I</p> <p>___ ENV 4001 (3) Environmental Engineering</p> <p style="text-align: center;"><b>CAPSTONE DESIGN REQ MW/MI</b></p> <p>___ _____ (3) _____</p> <p>___ CGN 4122 (1) Professional and Ethics</p> <p>___ <b>TOTAL DESIGN CREDITS</b></p>
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CLAST: \_\_\_\_\_ GORDON: \_\_\_\_\_ FLENT: \_\_\_\_\_ ABET D & B: \_\_\_\_\_

Code: T = Transfer W = Waived K = Clep A, B, C, D = Grade

\* Substitution allowed for transfer students with AA degree

\*\* EGN 3433 substitutes for MAP 2302

\*\*\* CHS 2440 substitutes for CHM 2045

## Civil Engineering (BSCE - 131 Hours)

### Civil Engineering Concentration and Capstone Design Requirements

**The following is a list of possible concentration electives that students may take. It is important that students adhere to prerequisites and corequisites in choosing their electives. Civil Engineering students take one of 3 tracks listed next:**

#### Structures/Materials/Geotechnical Track

_____	CES 4702	Concepts of Concrete Design *
_____	CES 4605	Concepts of Steel Design*
_____	CGN 4851	Concrete Construction Materials*
_____	CEG 4012	Geotechnical Engineering II
<b>or</b>		
_____	TTE 4005	Transportation Engineering II
_____		Technical Elective
_____	CES 4750	Capstone Structures/Materials/Geotechnical Design

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#### Geotechnical/Transportation Track

_____	CGN 4851	Concrete Construction Materials*
_____	CEG 4012	Geotechnical Engineering II*
_____	TTE 4005	Transportation Engineering II*
_____		Technical Elective
_____		Technical Elective
_____	CEG 4850	Capstone Geotechnical/Transportation Design

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#### Environmental/Water Resources Track

_____	ENV 4417	Water Quality and Treatment*
_____	CWR 4540	Water Resources Engineering*
_____	CEG 4012	Geotechnical Engineering II
<b>or</b>		
_____	TTE 4005	Transportation Engineering II
_____		Technical Elective
_____		Technical Elective
_____	CWR 4812	Capstone Water Resources/Environmental Design

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#### The program supports the following technical elective courses:

_____	CCE 4031	Construction Management
_____	CEG 4012	Geotechnical Engineering II
_____	CES 4605	Concepts of Steel Design
_____	CES 4702	Concepts of Concrete Design
_____	CGN 4851	Concrete Construction Materials
_____	CGN 4933	Special Topics in Civil & Environmental Engineering**
_____	CRW 4540	Water Resources Engineering I
_____	CWR 4541	Water Resources Engineering II
_____	ENV 4417	Water Quality and Treatment
_____	SUR 2101C	Land Surveying
_____	TTE 4003	Transportation and Society
_____	TTE 4005	Transportation Engineering II
_____	CWR 4541	Water Resources Engineering II

Students may, with the help of their advisor, formulate their own track to meet the requirements for a bachelor's degree in civil engineering. This track will consist of five electives coupled with a capstone design course (18 total credit hours).

\* Required for concentration.

\*\*Please see academic advisor for selected special topic courses.