

CURRICULUM PROPOSAL FORM

DEADLINES:

REGULAR COURSE PROPOSALS: OCTOBER 23, 1998 FOR FALL, 1999 AND FEBRUARY 19, 1999 FOR SPRING, 2000
SHORT-TERM COURSE PROPOSALS: DECEMBER 11, 1998 FOR FALL, 1999 AND MARCH 26, 1998 FOR SPRING 2000

PROPOSAL TITLE: Civil Engineering Curricula

SPONSOR/S: Ralph Alan Dusseau

DEPARTMENT: Civil Engineering

CHECK ALL THAT APPLY:
 UNDERGRADUATE GRADUATE

COLLEGE: Engineering
If LAS: History/Humanities
 Math/Sciences
 Social/Behavioral Sciences

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TYPE OF PROPOSAL (Check ALL that Apply)

<input type="checkbox"/> General Education	<input type="checkbox"/> New Course (NOT Gen. Ed.)
<input type="checkbox"/> New Course in _____ Bank	<input type="checkbox"/> Name Change (Dept., School, Major)
<input type="checkbox"/> Existing course, Add To _____ Bank	<input checked="" type="checkbox"/> Changes in Degree Requirements
<input type="checkbox"/> Multicultural/Global Designation	<input type="checkbox"/> Changes Involve Gen. Ed. requirements
<input type="checkbox"/> Writing Intensive Designation	<input type="checkbox"/> Minor Changes to Existing Courses
<input type="checkbox"/> New Minor/Concentration/Specialization	<input type="checkbox"/> Course is NOT General Education
<input type="checkbox"/> New Major/Degree Program	<input type="checkbox"/> Course IS General Education
<input type="checkbox"/> Short Term Course Proposal	

DEPARTMENT
(SIGNATURE INDICATES APPROVAL)

[Signature] 10/5/98 [Signature] 10/5/98

DEPT. CURRICULUM CHAIR / DATE DEPT. CHAIRPERSON / DATE

COLLEGE CURRICULUM COMMITTEE
DATE OF OPEN HEARING (if necessary) _____

APPROVED
 NOT APPROVED

COMMENTS:

SIGNATURE DATE

ACADEMIC DEAN (& GRADUATE DEAN, for New Graduate Programs Only)

APPROVED
 NOT APPROVED

COMMENTS:

[Signature] 10/19/98 [Signature] 10/19/98

SIGNATURE (Academic Dean) DATE

SIGNATURE (Graduate Dean) DATE

UNIVERSITY CURRICULUM COMMITTEE

DATE OF OPEN HEARING (if necessary) 3/2/99

APPROVED

NOT APPROVED

COMMENTS:

[Signature]
SIGNATURE

3/2/99
DATE

SENATE

Date announced at Senate 3/2/99

Voted upon at Senate: Approved Not Approved Date: _____

EXECUTIVE VICE PRESIDENT/PROVOST

APPROVED

NOT APPROVED If no, reasons are as follows:

STUDENT CREDIT HOURS _____ FACULTY LOAD HOURS _____ EQUALIZED CREDIT HOURS _____

OFFICIAL COPY & APPROVAL SHEET FILED (DATE): _____

DATE/SIGNATURE EXECUTIVE VICE PRESIDENT/PROVOST

[Signature]

REGISTRAR

DATE APPROVED COURSE DESCRIPTION RECEIVED _____

HEGIS TAXONOMY & COURSE NUMBER ASSIGNED _____

DATE/SIGNATURE OF REGISTRAR Robert A. Kubat 3/30/99

NOTIFICATION FORWARD:

SENATE CURRICULUM COMMITTEE CHAIRPERSON

DEPARTMENT CHAIRPERSONS

ACADEMIC DEAN(S)

REGISTRAR

SPONSOR(S)

7/11/99 2/21/99

Minor Changes

1. Details:
 - a) Change in Curricula: Minor curricula changes for all graduating classes. The only changes in the credit hours required for graduation is a reduction from 130 to 128 for the Class of 2001. There is no change in the general education content of the curricula.
 - b) Sponsor: Ralph Alan Dusseau, Chair of Civil Engineering and the Civil Engineering Curriculum Committee.
 - c) Credit Hours: The only change in the credit hours required for graduation is a reduction from 130 to 128 for the Class of 2001.
 - d) Curricular Effect: The changes affect all graduating classes in Civil Engineering.
 - e) Resources: No additional resources will be required.
1. Rationale: The proposed minor changes are consistent with the on-going assessment and review of the Engineering Programs. The minor changes are as follows:

All Civil Engineering Students:

- a. The creation of two 2-credit courses called Civil Engineering Design Project I and II which will serve as the civil engineering senior capstone design sequence. This design sequence is required for accreditation of civil engineering programs.
- b. The reduction in the Senior Engineering Clinic courses from 3 to 2 credits per course per semester to make room in the curriculum for the Civil Engineering Design Project I and II courses.
- c. The creation of one 1-credit course called Civil Engineering Practice which will be offered in the first semester of the senior year and which will serve to teach civil engineering students about the practice of civil engineering as seen from the perspective of practicing civil engineers. This type of course or experience is now required for accreditation of civil engineering programs.
- d. The change in the 3-credit course Surveying and Planning to a 2-credit Surveying course to make room for the Civil Engineering Practice course.

All Civil Engineering Students beginning with the Class of 2001:

- a. The reduction in the Junior Engineering Clinic courses from 3 to 2 credits per course per semester to make room in the curriculum for the Civil Engineering Design Project I and II courses.

All Civil Engineering Students beginning with the Class of 2002:

- a. The creation of a new required course called Introduction to Environmental Engineering.

All Civil Engineering Students beginning with the Class of 2003:

- a. The replacement of Chemistry I and II by Advanced College Chemistry I and II.

All Civil Engineering Students in the Infrastructure Emphasis:

- a. The elimination of Dynamics as a required course to make room for the Civil Engineering Design Project I and II courses.
- b. The change in the 4th science course to either Organic Chemistry I, Physics II, or Geology I.

All Civil Engineering Students in the Environmental Emphasis:

- a. The elimination of Engineering Thermodynamics I as a required course to make room for the Civil Engineering Design Project I and II courses.
- b. The change in the Solid and Hazardous Waste Management course from a required course to an elective course.
- c. The change in the Surveying course from an elective course to a required course.

Results of Consultations:

These changes are a result of recommendations made by civil engineering consultants over the last two years.

CIVIL ENGINEERING CURRICULUM - INFRASTRUCTURE EMPHASIS - Class of 2000:
 Prepared by Civil Engineering Curriculum Committee (R.A. Dusseau, K. Jahan, B. Sukumaran,
 J. Everett. and D. Cleary) on November 20, 1998

General Education:

Communications:

College Composition I - 1501.111	3
College Composition II - taken as Freshman Engineering Clinic II (0901.102) and as Sophomore Engineering Clinic I (0901.201)	
Public Speaking - 1506.202	3

Science and Mathematics:

Calculus I - 1701.130	4
Chemistry I - 1906.100	4

History, Humanities, and Language:

History, Humanities, and Language elective	3
History, Humanities, and Language elective	3

Social and Behavioral Sciences:

Introduction to Microeconomics - 2204.102	3
Social and Behavioral Science elective	3

Arts:

Art elective	3
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General Education Electives:

(Taken to fulfil accreditation requirements)

Calculus II - 1701.131	4
Physics I - 1902.200	4
Chemistry II - 1906.101	4

Major Requirements:

Computer Science and Programming - 1704.103	4
Freshman Engineering Clinic I - 0901.101	3
Freshman Engineering Clinic II - 0901.102	3
Statics - 0901.271	2
Solid Mechanics - 0901.272	2
Sophomore Engineering Clinic I - 0901.201	3
Sophomore Engineering Clinic II - 0901.202	1
Math for Engineering Analysis I - 1701.334	4
Math for Engineering Analysis II - 1701.335	4
Organic Chemistry I - 1907.300 or Physics II - 1902.201	4
Structural Engineering I - 0908.281	3
Fluid Mechanics I - 0901.341	2
Engineering Materials I - 0901.281	2
Civil Engineering Materials - 0908.301	2
Civil Engineering Systems - 0908.305	2
Structural Engineering II - 0908.382	3

Structural Engineering III - 0908.383	3
Water Resources Engineering - 0908.342	3
Geotechnical Engineering - 0908.351	3
Surveying - 0908.202	2
Junior Engineering Clinic I - 0901.301	3
Junior Engineering Clinic II - 0901.302	3
Civil Engineering Practice - 0908.490	1
Civil Engineering Design Project I - 0908.491	2
Transportation Engineering - 0908.461	3
Geotechnical Engineering Elective - 0908.45x*	3
Civil Engineering Design Project II - 0908.492	2
Structural Engineering Elective - 0908.48x*	3
Water Resources Engineering Elective - 0908.44x*	3
Transportation Engineering Elective - 0908.46x*	3
Senior Engineering Clinic I - 0901.401	2
Senior Engineering Clinic II - 0901.402	2
Technical Elective*	3
 Total Credits	 129

*Approval of Advisor Required

CIVIL ENGINEERING CURRICULUM - ENVIRONMENTAL EMPHASIS - Class of 2000:
 Prepared by Civil Engineering Curriculum Committee (R. A. Dusseau, K. Jahan, B. Sukumaran,
 J. Everett. and D. Cleary) on November 20, 1998

General Education:

Communications:

College Composition I - 1501.111	3
College Composition II - taken as Freshman Engineering Clinic II (0901.102) and as Sophomore Engineering Clinic I (0901.201)	
Public Speaking - 1506.202	3

Science and Mathematics:

Calculus I - 1701.130	4
Chemistry I - 1906.100	4

History, Humanities, and Language:

History, Humanities, and Language elective	3
History, Humanities, and Language elective	3

Social and Behavioral Sciences:

Introduction to Microeconomics - 2204.102	3
Social and Behavioral Science elective	3

Arts:

Art elective	3
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General Education Electives:

(Taken to fulfil accreditation requirements)	
Calculus II - 1701.131	4
Physics I - 1902.200	4
Chemistry II - 1906.101	4

Major Requirements:

Computer Science and Programming - 1704.103	4
Freshman Engineering Clinic I - 0901.101	3
Freshman Engineering Clinic II - 0901.102	3
Statics - 0901.271	2
Solid Mechanics - 0901.272	2
Sophomore Engineering Clinic I - 0901.201	3
Sophomore Engineering Clinic II - 0901.202	1
Math for Engineering Analysis I - 1701.334	4
Math for Engineering Analysis II - 1701.335	4
Organic Chemistry I - 1907.300	4
Structural Engineering I - 0908.281	3
Fluid Mechanics I - 0901.341	2
Engineering Materials I - 0901.281	2
Civil Engineering Materials - 0908.301	2
Civil Engineering Systems - 0908.305	2
Water Resources Engineering - 0908.342	3
Geotechnical Engineering - 0908.351	3

Water Treatment - 0908.311	3
Surveying - 0908.202	2
Junior Engineering Clinic I - 0901.301	3
Junior Engineering Clinic II - 0901.302	3
Civil Engineering Practice - 0908.490	1
Civil Engineering Design Project I - 0908.491	2
Geotechnical Engineering Elective - 0908.45x*	3
Waste-Water Treatment - 0908.421	3
Environmental Engineering Elective - 0908.4xx*	3
Environmental Engineering Elective - 0908.4xx*	3
Civil Engineering Design Project II - 0908.492	2
Structural Engineering Elective - 0908.48x*	3
Water Resources Engineering Elective - 0908.44x*	3
Senior Engineering Clinic I - 0901.401	2
Senior Engineering Clinic II - 0901.402	2
Technical Elective*	3
 Total Credits	 129

*Approval of Advisor Required

CIVIL ENGINEERING CURRICULUM - INFRASTRUCTURE EMPHASIS - Class of 2001:
 Prepared by Civil Engineering Curriculum Committee (R.A. Dusseau, K. Jahan, B. Sukumaran,
 J. Everett. and D. Cleary) on November 20, 1998

General Education:

Communications:

College Composition I - 1501.111	3
College Composition II - taken as Sophomore Engineering Clinic I (0901.201)	
Public Speaking - taken as Sophomore Engineering Clinic II (0901.202)	

Science and Mathematics:

Calculus I - 1701.130	4
Chemistry I - 1906.100	4

History, Humanities, and Language:

History, Humanities, and Language elective	3
History, Humanities, and Language elective	3

Social and Behavioral Sciences:

Introduction to Microeconomics - 2204.102	3
Social and Behavioral Science elective	3

Arts:

Art elective	3
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General Education Electives:

(Taken to fulfil accreditation requirements)	
Calculus II - 1701.131	4
Physics I - 1902.200	4
Chemistry II - 1906.101	4

Major Requirements:

Computer Science and Programming - 1704.103	4
Freshman Engineering Clinic I - 0901.101	3
Freshman Engineering Clinic II - 0901.102	3
Statics - 0901.271	2
Solid Mechanics - 0901.272	2
Sophomore Engineering Clinic I - 0901.201	4
Sophomore Engineering Clinic II - 0901.202	4
Math for Engineering Analysis I - 1701.334	4
Math for Engineering Analysis II - 1701.335	4
Surveying - 0908.202	2
Structural Engineering I - 0908.281	3
Fluid Mechanics I - 0901.341	2
Material Science - 0901.281	2
Civil Engineering Materials - 0908.301	2
Civil Engineering Systems - 0908.305	2
Structural Engineering II - 0908.382	3
Structural Engineering III - 0908.383	3
Water Resources Engineering - 0908.342	3

Organic Chemistry I - 1907.300 or Physics II - 1902.201 or Geology I - 1914.101	4
Geotechnical Engineering - 0908.351	3
Junior Engineering Clinic I - 0901.301	2
Junior Engineering Clinic II - 0901.302	2
Civil Engineering Practice - 0908.490	1
Civil Engineering Design Project I - 0908.491	2
Transportation Engineering - 0908.461	3
Geotechnical Engineering Elective - 0908.45x*	3
Civil Engineering Design Project II - 0908.492	2
Structural Engineering Elective - 0908.48x*	3
Water Resources Engineering Elective - 0908.44x*	3
Transportation Engineering Elective - 0908.46x*	3
Senior Engineering Clinic I - 0901.401	2
Senior Engineering Clinic II - 0901.402	2
Technical Elective*	3
 Total Credits	 128

*Approval of Advisor Required

CIVIL ENGINEERING CURRICULUM - ENVIRONMENTAL EMPHASIS - Class of 2001:
 Prepared by Civil Engineering Curriculum Committee (R.A. Dusseau, K. Jahan, B. Sukumaran,
 J. Everett. and D. Cleary) on November 20, 1998

General Education:

Communications:

College Composition I - 1501.111	3
College Composition II - taken as Sophomore Engineering Clinic I (0901.201)	
Public Speaking - taken as Sophomore Engineering Clinic II (0901.202)	

Science and Mathematics:

Calculus I - 1701.130	4
Chemistry I - 1906.100	4

History, Humanities, and Language:

History, Humanities, and Language elective	3
History, Humanities, and Language elective	3

Social and Behavioral Sciences:

Introduction to Microeconomics - 2204.102	3
Social and Behavioral Science elective	3

Arts:

Art elective	3
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General Education Electives:

(Taken to fulfil accreditation requirements)

Calculus II - 1701.131	4
Physics I - 1902.200	4
Chemistry II - 1906.101	4

Major Requirements:

Computer Science and Programming - 1704.103	4
Freshman Engineering Clinic I - 0901.101	3
Freshman Engineering Clinic II - 0901.102	3
Statics - 0901.271	2
Solid Mechanics - 0901.272	2
Sophomore Engineering Clinic I - 0901.201	4
Sophomore Engineering Clinic II - 0901.202	4
Math for Engineering Analysis I - 1701.334	4
Math for Engineering Analysis II - 1701.335	4
Surveying - 0908.202	2
Structural Engineering I - 0908.281	3
Fluid Mechanics I - 0901.341	2
Material Science - 0901.281	2
Civil Engineering Materials - 0908.301	2
Civil Engineering Systems - 0908.305	2
Organic Chemistry I - 1907.300	4
Water Resources Engineering - 0908.342	3
Geotechnical Engineering - 0908.351	3

Water Treatment - 0908.311	3
Junior Engineering Clinic I - 0901.301	2
Junior Engineering Clinic II - 0901.302	2
Civil Engineering Practice - 0908.490	1
Civil Engineering Design Project I - 0908.491	2
Geotechnical Engineering Elective - 0908.45x*	3
Waste-Water Treatment - 0908.421	3
Environmental Engineering Elective - 0908.4xx*	3
Environmental Engineering Elective - 0908.4xx*	3
Civil Engineering Design Project II - 0908.492	2
Structural Engineering Elective - 0908.48x*	3
Water Resources Engineering Elective - 0908.44x*	3
Senior Engineering Clinic I - 0901.401	2
Senior Engineering Clinic II - 0901.402	2
Technical Elective*	3
Total Credits	128

*Approval of Advisor Required

CIVIL ENGINEERING CURRICULUM - INFRASTRUCTURE EMPHASIS - Class of 2002:
 Prepared by Civil Engineering Curriculum Committee (R.A. Dusseau, K. Jahan, B. Sukumaran, J. Everett. and D. Cleary) on November 20, 1998

General Education:

Communications:

College Composition I - 1501.111	3
College Composition II - taken as Sophomore Engineering Clinic I (0901.201)	
Public Speaking - taken as Sophomore Engineering Clinic II (0901.202)	

Science and Mathematics:

Calculus I - 1701.130	4
Chemistry I - 1906.100	4

History, Humanities, and Language:

History, Humanities, and Language elective	3
History, Humanities, and Language elective	3

Social and Behavioral Sciences:

Introduction to Microeconomics - 2204.102	3
Social and Behavioral Science elective	3

Arts:

Art elective	3
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General Education Electives:

(Taken to fulfil accreditation requirements)	
Calculus II - 1701.131	4
Physics I - 1902.200	4
Chemistry II - 1906.101	4

Major Requirements:

Computer Science and Programming - 1704.103	4
Freshman Engineering Clinic I - 0901.101	2
Freshman Engineering Clinic II - 0901.102	2
Statics - 0901.271	2
Solid Mechanics - 0901.272	2
Sophomore Engineering Clinic I - 0901.201	4
Sophomore Engineering Clinic II - 0901.202	4
Math for Engineering Analysis I - 1701.334	4
Math for Engineering Analysis II - 1701.335	4
Introduction to Environmental Engineering - 0908.210	2
Surveying - 0908.202	2
Structural Engineering I - 0908.281	3
Fluid Mechanics I - 0901.341	2
Material Science - 0901.281	2
Civil Engineering Materials - 0908.301	2
Civil Engineering Systems - 0908.305	2
Structural Engineering II - 0908.382	3
Structural Engineering III - 0908.383	3

Water Resources Engineering - 0908.342	3
Geotechnical Engineering - 0908.351	3
Organic Chemistry I - 1907.300 or Physics II - 1902.201 or Geology I - 1914.101	4
Junior Engineering Clinic I - 0901.301	2
Junior Engineering Clinic II - 0901.302	2
Civil Engineering Practice - 0908.490	1
Civil Engineering Design Project I - 0908.491	2
Transportation Engineering - 0908.461	3
Geotechnical Engineering Elective - 0908.45x*	3
Civil Engineering Design Project II - 0908.492	2
Structural Engineering Elective - 0908.48x*	3
Water Resources Engineering Elective - 0908.44x*	3
Transportation Engineering Elective - 0908.46x*	3
Senior Engineering Clinic I - 0901.401	2
Senior Engineering Clinic II - 0901.402	2
Technical Elective*	3
 Total Credits	 128

*Approval of Advisor Required

CIVIL ENGINEERING CURRICULUM - ENVIRONMENTAL EMPHASIS - Class of 2002:
 Prepared by Civil Engineering Curriculum Committee (R.A. Dusseau, K. Jahan, B. Sukumaran, J. Everett. and D. Cleary) on November 20, 1998

General Education:

Communications:

College Composition I - 1501.111	3
College Composition II - taken as Sophomore Engineering Clinic I (0901.201)	
Public Speaking - taken as Sophomore Engineering Clinic II (0901.202)	

Science and Mathematics:

Calculus I - 1701.130	4
Chemistry I - 1906.100	4

History, Humanities, and Language:

History, Humanities, and Language elective	3
History, Humanities, and Language elective	3

Social and Behavioral Sciences:

Introduction to Microeconomics - 2204.102	3
Social and Behavioral Science elective	3

Arts:

Art elective	3
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General Education Electives:

(Taken to fulfil accreditation requirements)	
Calculus II - 1701.131	4
Physics I - 1902.200	4
Chemistry II - 1906.101	4

Major Requirements:

Computer Science and Programming - 1704.103	4
Freshman Engineering Clinic I - 0901.101	2
Freshman Engineering Clinic II - 0901.102	2
Statics - 0901.271	2
Solid Mechanics - 0901.272	2
Sophomore Engineering Clinic I - 0901.201	4
Sophomore Engineering Clinic II - 0901.202	4
Math for Engineering Analysis I - 1701.334	4
Math for Engineering Analysis II - 1701.335	4
Structural Engineering I - 0908.281	3
Introduction to Environmental Engineering - 0908.210	2
Surveying - 0908.202	2
Fluid Mechanics I - 0901.341	2
Material Science - 0901.281	2
Civil Engineering Materials - 0908.301	2
Civil Engineering Systems - 0908.305	2
Water Resources Engineering - 0908.342	3
Geotechnical Engineering - 0908.351	3

Water Treatment - 0908.311	3
Organic Chemistry I - 1907.300	4
Junior Engineering Clinic I - 0901.301	2
Junior Engineering Clinic II - 0901.302	2
Civil Engineering Practice - 0908.490	1
Civil Engineering Design Project I - 0908.491	2
Geotechnical Engineering Elective - 0908.45x*	3
Waste-Water Treatment - 0908.421	3
Environmental Engineering Elective - 0908.4xx*	3
Environmental Engineering Elective - 0908.4xx*	3
Civil Engineering Design Project II - 0908.492	2
Structural Engineering Elective - 0908.48x*	3
Water Resources Engineering Elective - 0908.44x*	3
Senior Engineering Clinic I - 0901.401	2
Senior Engineering Clinic II - 0901.402	2
Technical Elective*	3
Total Credits	128

*Approval of Advisor Required

CIVIL ENGINEERING CURRICULUM - INFRASTRUCTURE EMPHASIS - Class of 2003:
 Prepared by Civil Engineering Curriculum Committee (R.A. Dusseau, K. Jahan, B. Sukumaran, J. Everett. and D. Cleary) on November 20, 1998

General Education:

Communications:

College Composition I - 1501.111	3
College Composition II - taken as Sophomore Engineering Clinic I (0901.201)	
Public Speaking - taken as Sophomore Engineering Clinic II (0901.202)	

Science and Mathematics:

Calculus I - 1701.130	4
Advanced College Chemistry I - 1906.xxx	4

History, Humanities, and Language:

History, Humanities, and Language elective	3
History, Humanities, and Language elective	3

Social and Behavioral Sciences:

Introduction to Microeconomics - 2204.102	3
Social and Behavioral Science elective	3

Arts:

Art elective	3
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General Education Electives:

(Taken to fulfil accreditation requirements)	
Calculus II - 1701.131	4
Physics I - 1902.200	4
Advanced College Chemistry II - 1906.xxx	4

Major Requirements:

Computer Science and Programming - 1704.103	4
Freshman Engineering Clinic I - 0901.101	2
Freshman Engineering Clinic II - 0901.102	2
Statics - 0901.271	2
Solid Mechanics - 0901.272	2
Sophomore Engineering Clinic I - 0901.201	4
Sophomore Engineering Clinic II - 0901.202	4
Math for Engineering Analysis I - 1701.334	4
Math for Engineering Analysis II - 1701.335	4
Introduction to Environmental Engineering - 0908.210	2
Surveying - 0908.202	2
Structural Engineering I - 0908.281	3
Fluid Mechanics I - 0901.341	2
Material Science - 0901.281	2
Civil Engineering Materials - 0908.301	2
Civil Engineering Systems - 0908.305	2
Structural Engineering II - 0908.382	3
Structural Engineering III - 0908.383	3

Water Resources Engineering - 0908.342	3
Geotechnical Engineering - 0908.351	3
Organic Chemistry I - 1907.300	
or Physics II - 1902.201	
or Geology I - 1914.101	4
Junior Engineering Clinic I - 0901.301	2
Junior Engineering Clinic II - 0901.302	2
Civil Engineering Practice - 0908.490	1
Civil Engineering Design Project I - 0908.491	2
Transportation Engineering - 0908.461	3
Geotechnical Engineering Elective - 0908.45x*	3
Civil Engineering Design Project II - 0908.492	2
Structural Engineering Elective - 0908.48x*	3
Water Resources Engineering Elective - 0908.44x*	3
Transportation Engineering Elective - 0908.46x*	3
Senior Engineering Clinic I - 0901.401	2
Senior Engineering Clinic II - 0901.402	2
Technical Elective*	3
 Total Credits	 128

*Approval of Advisor Required

CIVIL ENGINEERING CURRICULUM - ENVIRONMENTAL EMPHASIS - Class of 2003:
 Prepared by Civil Engineering Curriculum Committee (R.A. Dusseau, K. Jahan, B. Sukumaran,
 J. Everett. and D. Cleary) on November 20, 1998

General Education:

Communications:

College Composition I - 1501.111	3
College Composition II - taken as Sophomore Engineering Clinic I (0901.201)	
Public Speaking - taken as Sophomore Engineering Clinic II (0901.202)	

Science and Mathematics:

Calculus I - 1701.130	4
Advanced College Chemistry I - 1906.xxx	4

History, Humanities, and Language:

History, Humanities, and Language elective	3
History, Humanities, and Language elective	3

Social and Behavioral Sciences:

Introduction to Microeconomics - 2204.102	3
Social and Behavioral Science elective	3

Arts:

Art elective	3
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General Education Electives:

(Taken to fulfil accreditation requirements)	
Calculus II - 1701.131	4
Physics I - 1902.200	4
Advanced College Chemistry II - 1906.xxx	4

Major Requirements:

Computer Science and Programming - 1704.103	4
Freshman Engineering Clinic I - 0901.101	2
Freshman Engineering Clinic II - 0901.102	2
Statics - 0901.271	2
Solid Mechanics - 0901.272	2
Sophomore Engineering Clinic I - 0901.201	4
Sophomore Engineering Clinic II - 0901.202	4
Math for Engineering Analysis I - 1701.334	4
Math for Engineering Analysis II - 1701.335	4
Structural Engineering I - 0908.281	3
Introduction to Environmental Engineering - 0908.210	2
Surveying - 0908.202	2
Fluid Mechanics I - 0901.341	2
Material Science - 0901.281	2
Civil Engineering Materials - 0908.301	2
Civil Engineering Systems - 0908.305	2
Water Resources Engineering - 0908.342	3
Geotechnical Engineering - 0908.351	3

Water Treatment - 0908.311	3
Organic Chemistry I - 1907.300	4
Junior Engineering Clinic I - 0901.301	2
Junior Engineering Clinic II - 0901.302	2
Civil Engineering Practice - 0908.490	1
Civil Engineering Design Project I - 0908.491	2
Geotechnical Engineering Elective - 0908.45x*	3
Waste-Water Treatment - 0908.421	3
Environmental Engineering Elective - 0908.4xx*	3
Environmental Engineering Elective - 0908.4xx*	3
Civil Engineering Design Project II - 0908.492	2
Structural Engineering Elective - 0908.48x*	3
Water Resources Engineering Elective - 0908.44x*	3
Senior Engineering Clinic I - 0901.401	2
Senior Engineering Clinic II - 0901.402	2
Technical Elective*	3
 Total Credits	 128

*Approval of Advisor Required

CIVIL ENGINEERING PROGRAM - INFRASTRUCTURE EMPHASIS - 129 SH (Interim-2000)

FIRST YEAR:

Freshman Engineering Clinic I	3	Freshman Engineering Clinic II	3
Calculus I	4	Calculus II	4
Chemistry I	4	Physics I	4
Composition I	3	Computer Science and Programming	4
General Education Course	3	General Education Course	3

Total	17	Total	18

SECOND YEAR:

Sophomore Engineering Clinic I	3	Sophomore Engineering Clinic II	1
Math for Engineering Analysis I	4	Math for Engineering Analysis II	4
Chemistry II	4	Organic Chemistry I *	4
Statics	2	Structural Engineering I	3
Solid Mechanics	2	Public Speaking	3
General Education Course	3	-----	
Total	18	Total	15

THIRD YEAR:

Junior Engineering Clinic I	3	Junior Engineering Clinic II	3
Structural Engineering II	3	Structural Engineering III	3
Fluid Mechanics I	2	Water Resources Engineering	3
Civil Engineering Systems	2	Surveying	2
Engineering Materials I	2	Geotechnical Engineering	3
Civil Engineering Materials	2	General Education Course	3
Introduction to Microeconomics	3	-----	
Total	17	Total	17

FOURTH YEAR:

Senior Engineering Clinic I	2	Senior Engineering Clinic II	2
Civil Engineering Design Project I	2	Civil Engineering Design Project II	2
Civil Engineering Practice	1	Structural Engineering Elective	3
Geotechnical Engineering Elective	3	Water Resources Engineering Elective	3
Transportation Engineering	3	Transportation Engineering Elective	3
Technical Elective	3	-----	
Total	14	Total	13

Total = 129 SH (Interim-2000)

* infrastructure students may choose Physics II in place of Organic Chemistry I

CIVIL ENGINEERING PROGRAM - ENVIRONMENTAL EMPHASIS - 129 SH (Interim-2000)

FIRST YEAR:

Freshman Engineering Clinic I	3	Freshman Engineering Clinic II	3
Calculus I	4	Calculus II	4
Chemistry I	4	Physics I	4
Composition I	3	Computer Science and Programming	4
General Education Course	3	General Education Course	3
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Total	17	Total	18

SECOND YEAR:

Sophomore Engineering Clinic I	3	Sophomore Engineering Clinic II	1
Math for Engineering Analysis I	4	Math for Engineering Analysis II	4
Chemistry II	4	Organic Chemistry I	4
Statics	2	Structural Engineering I	3
Solid Mechanics	2	Public Speaking	3
General Education Course	3		
<hr/>			
Total	18	Total	15

THIRD YEAR:

Junior Engineering Clinic I	3	Junior Engineering Clinic II	3
Fluid Mechanics I	2	Water Resources Engineering	3
Civil Engineering Systems	2	Water Treatment	3
Engineering Materials I	2	Geotechnical Engineering	3
Civil Engineering Materials	2	Surveying	2
Introduction to Microeconomics	3	General Education Course	3
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Total	14	Total	17

FOURTH YEAR:

Senior Engineering Clinic I	2	Senior Engineering Clinic II	2
Civil Engineering Design Project I	2	Civil Engineering Design Project II	2
Wastewater Treatment	3	Water Resources Engineering Elective	3
Environmental Engineering Elective	3	Environmental Engineering Elective	3
Geotechnical Engineering Elective	3	Structural Engineering Elective	3
Civil Engineering Practice	1		
Technical Elective	3		
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Total	17	Total	13

Total = 129 SH (Interim-2000)

CIVIL ENGINEERING PROGRAM - INFRASTRUCTURE EMPHASIS - 128 SH (Interim-2001)

FIRST YEAR:

Freshman Engineering Clinic I	3	Freshman Engineering Clinic II	3
Calculus I	4	Calculus II	4
Chemistry I	4	Physics I	4
Composition I	3	Computer Science and Programming	4
General Education Course	3	General Education Course	3

Total	17	Total	18

SECOND YEAR:

Sophomore Engineering Clinic I	4	Sophomore Engineering Clinic II	4
Math for Engineering Analysis I	4	Math for Engineering Analysis II	4
Chemistry II	4	Surveying	2
Statics	2	Structural Engineering I	3
Solid Mechanics	2	General Education Course	3

Total	16	Total	16

THIRD YEAR:

Junior Engineering Clinic I	2	Junior Engineering Clinic II	2
Structural Engineering II	3	Structural Engineering III	3
Fluid Mechanics I	2	Water Resources Engineering	3
Civil Engineering Systems	2	Organic Chemistry I*	4
Material Science	2	Geotechnical Engineering	3
Civil Engineering Materials	2	-----	
Introduction to Microeconomics	3	Total	15

Total	16		

FOURTH YEAR:

Senior Engineering Clinic I	2	Senior Engineering Clinic II	2
Civil Engineering Design Project I	2	Civil Engineering Design Project II	2
Geotechnical Engineering Elective	3	Water Resources Engineering Elective	3
Transportation Engineering	3	Transportation Engineering Elective	3
Civil Engineering Practice	1	Structural Engineering Elective	3
Technical Elective	3	-----	
General Education Course	3	Total	13

Total	17		

Total = 128 SH (Interim-2001)

* infrastructure students may choose Physics II or Geology I in place of Organic Chemistry I

CIVIL ENGINEERING PROGRAM - ENVIRONMENTAL EMPHASIS - 128 SH (Interim-2001)

FIRST YEAR:

Freshman Engineering Clinic I	3	Freshman Engineering Clinic II	3
Calculus I	4	Calculus II	4
Chemistry I	4	Physics I	4
Composition I	3	Computer Science and Programming	4
General Education Course	3	General Education Course	3

Total	17	Total	18

SECOND YEAR:

Sophomore Engineering Clinic I	4	Sophomore Engineering Clinic II	4
Math for Engineering Analysis I	4	Math for Engineering Analysis II	4
Chemistry II	4	Surveying	2
Statics	2	Structural Engineering I	3
Solid Mechanics	2	General Education Course	3

Total	16	Total	16

THIRD YEAR:

Junior Engineering Clinic I	2	Junior Engineering Clinic II	2
Fluid Mechanics I	2	Water Resources Engineering	3
Civil Engineering Systems	2	Water Treatment	3
Material Science	2	Geotechnical Engineering	3
Civil Engineering Materials	2	Organic Chemistry I	4
Introduction to Microeconomics	3	-----	
General Education Course	3	Total	15

Total	16		

FOURTH YEAR:

Senior Engineering Clinic I	2	Senior Engineering Clinic II	2
Civil Engineering Design Project I	2	Civil Engineering Design Project II	2
Wastewater Treatment	3	Water Resources Engineering Elective	3
Environmental Engineering Elective	3	Environmental Engineering Elective	3
Geotechnical Engineering Elective	3	Structural Engineering Elective	3
Civil Engineering Practice	1	-----	
Technical Elective	3	Total	13

Total	17		

Total = 128 SH (Interim-2001)

CIVIL ENGINEERING PROGRAM - INFRASTRUCTURE EMPHASIS - 128 SH (Interim - 2002)

FIRST YEAR:

Freshman Engineering Clinic I	2	Freshman Engineering Clinic II	2
Calculus I	4	Calculus II	4
Chemistry I	4	Physics I	4
Composition I	3	Computer Science and Programming	4
General Education Course	3	General Education Course	3

Total	16	Total	17

SECOND YEAR:

Sophomore Engineering Clinic I	4	Sophomore Engineering Clinic II	4
Math for Engineering Analysis I	4	Math for Engineering Analysis II	4
Chemistry II	4	Intro. to Environmental Engineering	2
Statics	2	Surveying	2
Solid Mechanics	2	Structural Engineering I	3

Total	16	Total	15

THIRD YEAR:

Junior Engineering Clinic I	2	Junior Engineering Clinic II	2
Structural Engineering II	3	Structural Engineering III	3
Fluid Mechanics I	2	Water Resources Engineering	3
Civil Engineering Systems	2	Organic Chemistry I*	4
Material Science	2	Geotechnical Engineering	3
Civil Engineering Materials	2	-----	
Introduction to Microeconomics	3	Total	15

Total	16		

FOURTH YEAR:

Senior Engineering Clinic I	2	Senior Engineering Clinic II	2
Civil Engineering Design Project I	2	Civil Engineering Design Project I	2
Geotechnical Engineering Elective	3	Water Resources Engineering Elective	3
Transportation Engineering	3	Transportation Engineering Elective	3
Civil Engineering Practice	1	General Education Course	3
Technical Elective	3	Structural Engineering Elective	3
General Education Course	3	-----	

Total	17	Total	16

Total = 128 SH (Interim - 2002)

* infrastructure students may choose Physics II or Geology I in place of Organic Chemistry I

CIVIL ENGINEERING PROGRAM - ENVIRONMENTAL EMPHASIS - 128 SH (Interim - 2002)

FIRST YEAR:

Freshman Engineering Clinic I	2	Freshman Engineering Clinic II	2
Calculus I	4	Calculus II	4
Chemistry I	4	Physics I	4
Composition I	3	Computer Science and Programming	4
General Education Course	3	General Education Course	3

Total	16	Total	17

SECOND YEAR:

Sophomore Engineering Clinic I	4	Sophomore Engineering Clinic II	4
Math for Engineering Analysis I	4	Math for Engineering Analysis II	4
Chemistry II	4	Intro. to Environmental Engineering	2
Statics	2	Surveying	2
Solid Mechanics	2	Structural Engineering I	3

Total	16	Total	15

THIRD YEAR:

Junior Engineering Clinic I	2	Junior Engineering Clinic II	2
Fluid Mechanics I	2	Water Resources Engineering	3
Civil Engineering Systems	2	Water Treatment	3
Material Science	2	Geotechnical Engineering	3
Civil Engineering Materials	2	Organic Chemistry I	4
Introduction to Microeconomics	3	-----	
General Education Course	3	Total	15

Total	16		

FOURTH YEAR:

Senior Engineering Clinic I	2	Senior Engineering Clinic II	2
Civil Engineering Design Project I	2	Civil Engineering Design Project II	2
Wastewater Treatment	3	Water Resources Engineering Elective	3
Environmental Engineering Elective	3	Environmental Engineering Elective	3
Geotechnical Engineering Elective	3	Structural Engineering Elective	3
Civil Engineering Practics	1	General Education Course	3
Technical Elective	3	-----	

Total	17	Total	16

Total = 128 SH (Interim - 2002)

CIVIL ENGINEERING PROGRAM - INFRASTRUCTURE EMPHASIS - 128 SH

FIRST YEAR:

Freshman Engineering Clinic I	2	Freshman Engineering Clinic II	2
Calculus I	4	Calculus II	4
Advanced College Chemistry I	4	Physics I	4
Composition I	3	Computer Science and Programming	4
General Education Course	3	General Education Course	3

Total	16	Total	17

SECOND YEAR:

Sophomore Engineering Clinic I	4	Sophomore Engineering Clinic II	4
Math for Engineering Analysis I	4	Math for Engineering Analysis II	4
Advanced College Chemistry II	4	Intro. to Environmental Engineering	2
Statics	2	Surveying	2
Solid Mechanics	2	Structural Engineering I	3

Total	16	Total	15

THIRD YEAR:

Junior Engineering Clinic I	2	Junior Engineering Clinic II	2
Structural Engineering II	3	Structural Engineering III	3
Fluid Mechanics I	2	Water Resources Engineering	3
Civil Engineering Systems	2	Organic Chemistry I*	4
Material Science	2	Geotechnical Engineering	3
Civil Engineering Materials	2	-----	
Introduction to Microeconomics	3	Total	15

Total	16		

FOURTH YEAR:

Senior Engineering Clinic I	2	Senior Engineering Clinic II	2
Civil Engineering Design Project I	2	Civil Engineering Design Project I	2
Geotechnical Engineering Elective	3	Water Resources Engineering Elective	3
Transportation Engineering	3	Transportation Engineering Elective	3
Civil Engineering Practice	1	General Education Course	3
Technical Elective	3	Structural Engineering Elective	3
General Education Course	3	-----	

Total	17	Total	16

Total = 128 SH

* infrastructure students may choose Physics II or Geology I in place of Organic Chemistry I

CIVIL ENGINEERING PROGRAM - ENVIRONMENTAL EMPHASIS - 128 SH

FIRST YEAR:

Freshman Engineering Clinic I	2	Freshman Engineering Clinic II	2
Calculus I	4	Calculus II	4
Advanced College Chemistry I	4	Physics I	4
Composition I	3	Computer Science and Programming	4
General Education Course	3	General Education Course	3
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Total	16	Total	17

SECOND YEAR:

Sophomore Engineering Clinic I	4	Sophomore Engineering Clinic II	4
Math for Engineering Analysis I	4	Math for Engineering Analysis II	4
Advanced College Chemistry II	4	Intro. to Environmental Engineering	2
Statics	2	Surveying	2
Solid Mechanics	2	Structural Engineering I	3
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Total	16	Total	15

THIRD YEAR:

Junior Engineering Clinic I	2	Junior Engineering Clinic II	2
Fluid Mechanics I	2	Water Resources Engineering	3
Civil Engineering Systems	2	Water Treatment	3
Material Science	2	Geotechnical Engineering	3
Civil Engineering Materials	2	Organic Chemistry I	4
Introduction to Microeconomics	3	<hr/>	
General Education Course	3	Total	15
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Total	16		

FOURTH YEAR:

Senior Engineering Clinic I	2	Senior Engineering Clinic II	2
Civil Engineering Design Project I	2	Civil Engineering Design Project II	2
Wastewater Treatment	3	Water Resources Engineering Elective	3
Environmental Engineering Elective	3	Environmental Engineering Elective	3
Geotechnical Engineering Elective	3	Structural Engineering Elective	3
Civil Engineering Practics	1	General Education Course	3
Technical Elective	3	<hr/>	
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Total	17	Total	16

Total = 128 SH