

CURRICULUM PROPOSAL FORM

***DEADLINES:**

ANNUAL 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: Minor Change in Curriculum for Chemical Engineering Program Year 2000, 2001, 2002, 2003 and beyond

SPONSOR/S: C. Stewart Slater and Chemical Engineering Curriculum Committee

DEPARTMENT: Chemical Engineering

CHECK ALL THAT APPLY:

UNDERGRADUATE GRADUATE

COLLEGE: Engineering

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

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 <u>Bank</u>	<input type="checkbox"/> Name Change (Dept., School, Major)
<input type="checkbox"/> Existing course, Add To <u>Bank</u>	<input 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 checked="" type="checkbox"/> Minor Changes to Existing Courses
<input type="checkbox"/> New Minor/Concentration/Specialization	<input checked="" 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)

Kelvin P. Hebeeth 12/1/98 [Signature] 12-1-98

DEPT. CURRICULUM CHAIR / DATE DEPT. CHAIRPERSON / DATE

COLLEGE CURRICULUM COMMITTEE

DATE OF OPEN HEARING (if necessary) _____

APPROVED

NOT APPROVED

COMMENTS:

Kelvin P. Hebeeth 2/9/99

SIGNATURE DATE

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

APPROVED

NOT APPROVED

COMMENTS:

[Signature] 12/2/98

SIGNATURE (Academic Dean) DATE

[Signature] _____

SIGNATURE (Graduate Dean) DATE

UNIVERSITY CURRICULUM COMMITTEE

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

APPROVED

NOT APPROVED

COMMENTS:

Quentin Rice 3/2/99
SIGNATURE 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

C. M. [Signature]

REGISTRAR

DATE APPROVED COURSE DESCRIPTION RECEIVED _____

HEGIS TAXONOMY & COURSE NUMBER ASSIGNED _____

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

NOTIFICATION FORWARD:

- SENATE CURRICULUM COMMITTEE CHAIRPERSON
- DEPARTMENT CHAIRPERSONS
- ACADEMIC DEAN(S)
- REGISTRAR
- SPONSOR(S)

TM 3/27/99

Minor Change

1. Details:

a) Change of Curricula: Minor curricular change for students graduating in years 2000, 2001, 2002, 2003 and beyond.

b) Sponsor: Dr. C. Stewart Slater, Chair of Chemical Engineering and the Chemical Engineering Curriculum Committee

c) Credit Hours: There is no change in total credit hours of the previous approved curricula and there is no change in the general education credits. There are some minor changes in courses that have been modified and these have been previously submitted as separate Minor Changes.

d) Curricular Effect: The curricular changes affect graduating classes of 2000, 2001, 2002, 2003 and beyond.

e) Resources: No additional resources will be needed for this minor change

2. Rationale:

The proposed minor change is consistent with the on-going assessment and review of the College of Engineering's programs of study. The Minor Changes are as follows.

Class of 2000. The Senior Engineering Clinic I (0901.401) and Senior Engineering Clinic II (0901.402) are each changed from 3 to 2 credits. Transport Phenomena is added as a required course (a Minor Change has been submitted for this). The total credits remain unchanged at 133.

Class of 2001. Same as above with the Junior Engineering Clinic I (0901.301) and Junior Engineering Clinic II (0901.302) are each changed from 3 to 2 credits. Reaction Engineering becomes a 4 credit course. The total credits remain unchanged at 133.

Class of 2002. Same as above. The total credits remain unchanged at 131.

Class of 2003. Same as above. In addition the courses, Chemistry I & II are replaced by Advanced College Chemistry I & II which is now being developed by the Department of Chemistry and Physics. The total credits remain unchanged at 131.

3. Results of Consultations:

The various aspects of these changes have been discussed with ABET consultants who endorsed these changes. These changes do not effect any other program.

CHEMICAL ENGINEERING CURRICULUM – Class of 2000

November 25, 1998

revised by ChE Curriculum Committee (R.P. Hesketh (Chair), S. Farrell, Z. Otero Keil, J. Newell, C.S. Slater)

Category, Course, Hegis number, Semester hrs.

General Education

Communications

College Composition I	1501.111	3
College Composition II	taken as Fresh Engineering Clinic II 0901.102 and Soph. Engineering Clinic I 0901.201	<i>see below</i>
Public Speaking	1506.202	3

Science and Mathematics

Calculus I	1701.130	4
Chemistry I	1906.100	4

History, Humanities, Language

History, Humanities, Language		3
History, Humanities, Language		3

Social and Behavioral Sciences

Intro to Microeconomics	2204.102	3
Social and Behavioral Science		3

Arts

3

General Education Electives

Taken to fulfill AIChE/ABET Accreditation requirements

Calculus II	1701.131	4
Physics I	1902.200	4
Physics II or Biology I	1902.201 / 0401.100	4

Major Requirements

Computer Sci & Program.	1704.103	4
Fresh. Engineering Clinic I	0901.101	3
Fresh. Engineering Clinic II	0901.102	3
Chemistry II	1906.101	4
Principles Chemical Processes I	0906.201	2
Math for Engineering Anal I	1701.334	4
Math for Engineering Anal II	1701.335	4
Principles Chemical Processes II	0906.302	2
Fluid Mechanics I	0901.341	2
Soph. Engineering Clinic II	0901.202	1
Soph. Engineering Clinic I	0901.201	3
Organic Chemistry I	1907.200	4
Process Fluid Transport	0906.309	2

Transfer Processes I - Heat	0906.311	2
Transfer Processes II - Mass	0906.312	2
Engineering Materials I	0901.281	2
Junior Engineering Clinic I ³	0901.301	3
Junior Engineering Clinic II ³	0901.302	3
Chemical Engineering Thermo.	0906.310	3
Chemical Reaction Engineering	0906.316	3
Physical Chemistry I	1908.400	3
Separation Processes	0906.314	4
Transport Phenomena	0906.402	3
Chemical Process Component Design	0906.401	4
Unit Operations Lab	0906.403	3
Process Dynamics & Control	0906.405	3
Approved Chem. Eng. Elec. I ²	0906.XXX	3
Approved Chem. Eng. Elec. II ²	0906.XXX	3
Senior Engineering Clinic I ³	0901.401	2
Senior Engineering Clinic II ³	0901.402	2
Approved Chemistry Elective ¹		3
Chemical Plant Design	0906.406	3
TOTAL CREDITS		133

Notes:

1. Required/Approved Courses taken to satisfy ABET category of "Advanced Chemistry" May be exchanged with ChE Elective in Fall. Course must come from a list of approved courses provided by the Ch.E. Chair.
2. Required/Approved courses taken to satisfy Chemical Engineering ABET categories/ AIChE electives. Courses must be taken from a list of approved courses provided by the Ch.E. Chair. One of these courses must have substantial advanced science content. Technical electives may be taken in either semester of Senior year.
3. Junior/Senior Clinics are a project-based experience. Projects must be approved by a ChE Projects Committee and are writing intensive (WI) courses.

CHEMICAL ENGINEERING CURRICULUM – Class of 2001

November 25, 1998

revised by ChE Curriculum Committee (R.P. Hesketh (Chair), S. Farrell, Z. Otero Keil, J. Newell, C.S.Slater)

General Education

Communications

College Composition I	1501.111	3
College Composition II taken as Soph. Engineering Clinic I	0901.201 <i>see below</i>	
Public Speaking taken as Soph. Engineering Clinic II	0901.202 <i>see below</i>	

Science and Mathematics

Calculus I	1701.130	4
Chemistry I	1906.100	4

History, Humanities, Language

History, Humanities, Language		3
History, Humanities, Language		3

Social and Behavioral Sciences

Intro to Microeconomics	2204.102	3
Social and Behavioral Science		3

Arts

3

General Education Electives

Taken to fulfill AICHE/ABET Accreditation requirements

Calculus II	1701.131	4
Physics I	1902.200	4
Physics II or Biology I	1902.201 / 0401.100	4

Major Requirements

Computer Sci & Program.	1704.103	4
Fresh. Engineering Clinic I	0901.101	3
Fresh. Engineering Clinic II	0901.102	3
Chemistry II	1906.101	4
Principles Chemical Processes I	0906.201	2
Math for Engineering Anal I	1701.334	4
Math for Engineering Anal II	1701.335	4
Principles Chemical Processes II	0906.302	2
Fluid Mechanics I	0901.341	2
Soph. Engineering Clinic II	0901.202	4
Soph. Engineering Clinic I	0901.201	4
Organic Chemistry I	1907.200	4
Process Fluid Transport	0906.309	2
Transfer Processes I - Heat	0906.311	2
Transfer Processes II - Mass	0906.312	2
Engineering Materials I	0901.281	2

Junior Engineering Clinic I ³ 0901.301	2
Junior Engineering Clinic II ³ 0901.302	2
Chemical Engineering Thermo. 0906.310	3
Chemical Reaction Engineering 0906.316	4
Physical Chemistry I 1908.400	3
Separation Processes 0906.314	4
Transport Phenomena 0906.402	3
Chemical Process Component Design 0906.401	4
Unit Operations Lab 0906.403	3
Process Dynamics & Control 0906.405	3
Approved Chem. Eng. Elec. I ² 0906.XXX	3
Approved Chem. Eng. Elec. II ² 0906.XXX	3
Senior Engineering Clinic I ³ 0901.401	2
Senior Engineering Clinic II ³ 0901.402	2
Approved Chemistry Elective ¹	3
Chemical Plant Design 0906.406	3
TOTAL CREDITS	133

Notes:

1. Required/Approved Courses taken to satisfy ABET category of "Advanced Chemistry" May be exchanged with ChE Elective in Fall. Course must come from a list of approved courses provided by the Ch.E. Chair.
2. Required/Approved courses taken to satisfy Chemical Engineering ABET categories/ AIChE electives. Courses must be taken from a list of approved courses provided by the Ch.E. Chair. One of these courses must have substantial advanced science content. Technical electives may be taken in either semester of Senior year.
3. Junior/Senior Clinics are a project-based experience. Projects must be approved by a ChE Projects Committee and are writing intensive (WI) courses.

CHEMICAL ENGINEERING CURRICULUM - Class of 2002

November 25, 1998

revised by ChE Curriculum Committee (R.P. Hesketh (Chair), S. Farrell, Z. Otero Keil, J. Newell, C.S.Slater)

General Education

Communications

College Composition I	1501.111	3
College Composition II	taken as Soph. Engineering Clinic I	0901.201 <i>see below</i>
Public Speaking	taken as Soph. Engineering Clinic II	0901.202 <i>see below</i>

Science and Mathematics

Calculus I	1701.130	4
Chemistry I	1906.100	4

History, Humanities, Language

History, Humanities, Language		3
History, Humanities, Language		3

Social and Behavioral Sciences

Intro to Microeconomics	2204.102	3
Social and Behavioral Science		3

Arts

3

General Education Electives

Taken to fulfill AICHE/ABET Accreditation requirements

Calculus II	1701.131	4
Physics I	1902.200	4
Physics II or Biology I	1902.201 / 0401.100	4

Major Requirements

Computer Sci & Program.	1704.103	4
Fresh. Engineering Clinic I	0901.101	2
Fresh. Engineering Clinic II	0901.102	2
Chemistry II	1906.101	4
Principles Chemical Processes I	0906.201	2
Math for Engineering Anal I	1701.334	4
Math for Engineering Anal II	1701.335	4
Principles Chemical Processes II	0906.302	2
Fluid Mechanics I	0901.341	2
Soph. Engineering Clinic II	0901.202	4
Soph. Engineering Clinic I	0901.201	4
Organic Chemistry I	1907.200	4
Process Fluid Transport	0906.309	2
Transfer Processes I - Heat	0906.311	2
Transfer Processes II - Mass	0906.312	2
Material Science	0901.281	2

Junior Engineering Clinic I ³ 0901.301	2
Junior Engineering Clinic II ³ 0901.302	2
Chemical Engineering Thermo. 0906.310	3
Chemical Reaction Engineering 0906.316	4
Physical Chemistry I 1908.400	3
Separation Processes 0906.314	4
Transport Phenomena 0906.402	3
Chemical Process Component Design 0906.401	4
Process Dynamics & Control 0906.405	3
Unit Operations Lab 0906.403	3
Process Dynamics & Control 0906.405	3
Approved Chem. Eng. Elec. I ² 0906.XXX	3
Approved Chem. Eng. Elec. II ² 0906.XXX	3
Senior Engineering Clinic I ³ 0901.401	2
Senior Engineering Clinic II ³ 0901.402	2
Approved Chemistry Elective ¹	3
Chemical Plant Design 0906.406	3
TOTAL CREDITS	131

Notes:

1. Required/Approved Courses taken to satisfy ABET category of "Advanced Chemistry" May be exchanged with ChE Elective in Fall. Course must come from a list of approved courses provided by the Ch.E. Chair.
2. Required/Approved courses taken to satisfy Chemical Engineering ABET categories/ AIChE electives. Courses must be taken from a list of approved courses provided by the Ch.E. Chair. One of these courses must have substantial advanced science content. Technical electives may be taken in either semester of Senior year.
3. Junior/Senior Clinics are a project-based experience. Projects must be approved by a ChE Projects Committee and are writing intensive (WI) courses.

CHEMICAL ENGINEERING CURRICULUM - Class of 2003 and beyond

November 25, 1998

revised by ChE Curriculum Committee (R.P. Hesketh (Chair), S. Farrell, Z. Otero Keil, J. Newell, C.S. Slater)

General Education

Communications

College Composition I	1501.111	3
College Composition II	taken as Soph. Engineering Clinic I	0901.201 <i>see below</i>
Public Speaking	taken as Soph. Engineering Clinic II	0901.202 <i>see below</i>

Science and Mathematics

Calculus I	1701.130	4
Advanced College Chemistry I	1906.1XX	4

History, Humanities, Language

History, Humanities, Language		3
History, Humanities, Language		3

Social and Behavioral Sciences

Intro to Microeconomics	2204.102	3
Social and Behavioral Science		3

Arts

3

General Education Electives

Taken to fulfill AICHe/ABET Accreditation requirements

Calculus II	1701.131	4
Physics I	1902.200	4
Physics II or Biology I	1902.201 / 0401.100	4

Major Requirements

Computer Sci & Program.	1704.103	4
Fresh. Engineering Clinic I	0901.101	2
Fresh. Engineering Clinic II	0901.102	2
Advanced College Chemistry II	1906.1XX	4
Principles Chemical Processes I	0906.201	2
Math for Engineering Anal I	1701.334	4
Math for Engineering Anal II	1701.335	4
Principles Chemical Processes II	0906.302	2
Fluid Mechanics I	0901.341	2
Soph. Engineering Clinic II	0901.202	4
Soph. Engineering Clinic I	0901.201	4
Organic Chemistry I	1907.200	4
Process Fluid Transport	0906.309	2
Transfer Processes I - Heat	0906.311	2
Transfer Processes II - Mass	0906.312	2
Material Science	0901.281	2

Junior Engineering Clinic I ³ 0901.301	2
Junior Engineering Clinic II ³ 0901.302	2
Chemical Engineering Thermo. 0906.310	3
Chemical Reaction Engineering 0906.316	4
Physical Chemistry I 1908.400	3
Separation Processes 0906.314	4
Transport Phenomena 0906.402	3
Chemical Process Component Design 0906.401	4
Process Dynamics & Control 0906.405	3
Unit Operations Lab 0906.403	3
Process Dynamics & Control 0906.405	3
Approved Chem. Eng. Elec. I ² 0906.XXX	3
Approved Chem. Eng. Elec. II ² 0906.XXX	3
Senior Engineering Clinic I ³ 0901.401	2
Senior Engineering Clinic II ³ 0901.402	2
Approved Chemistry Elective ¹	3
Chemical Plant Design 0906.406	3
TOTAL CREDITS	131

Notes:

1. Required/Approved Courses taken to satisfy ABET category of "Advanced Chemistry" May be exchanged with ChE Elective in Fall. Course must come from a list of approved courses provided by the Ch.E. Chair.
2. Required/Approved courses taken to satisfy Chemical Engineering ABET categories/ AIChE electives. Courses must be taken from a list of approved courses provided by the Ch.E. Chair. One of these courses must have substantial advanced science content. Technical electives may be taken in either semester of Senior year.
3. Junior/Senior Clinics are a project-based experience. Projects must be approved by a ChE Projects Committee and are writing intensive (WI) courses.

CHEMICAL ENGINEERING CURRICULUM - 2000

Sept 1 1998

revised by ChE Curriculum Committee (R.P. Hesketh, Z. O. Keil, S. Farrell, J. Newell, C.S.Slater)

FIRST YEAR

Composition I 1501.111	3	Calculus II 1701.131	4
Calculus I 1701.130	4	Computer Sci & Program. 0704.103	4
Chemistry I 1906.100	4	Fresh. Engineering Clinic II 0901.102	3
Fresh. Engineering Clinic I 0901.101	3	Physics I 1902.200	4
General Education	3	General Education	3
Total	17	Total	18

SECOND YEAR

		Principles Chemical Processes I 0906.201	2
		Math for Engineering Anal II 1701.335	4
Math for Engineering Anal I 1701.334	4	Principles Chemical Processes II 0906.302	2
Physics II or Biology I 1902.201 / 0401.100	4	Fluid Mechanics I 0901.341	2
Chemistry II 1906.101	4	Soph. Engineering Clinic II 0901.202	1
Soph. Engineering Clinic I 0901.201	3	Public Speaking 1506.202	3
		Organic Chemistry I 1907.200	4
Total	15	Total	18

THIRD YEAR

Microeconomics 2204.102	3		
Process Fluid Transport 0906.309	2	General Education	3
Transfer Processes I - Heat 0906.311	2	Chem. Engineering Thermo. 0906.310	3
Transfer Processes II - Mass 0906.312	2	Junior Engineering Clinic II ³ 0901.302	3
Engineering Materials I 0901.281	2	Chemical Reaction Engineering 0906.316	3
Physical Chemistry I 1908.400	3	Separation Processes 0906.314	4
Junior Engineering Clinic I ³ 0901.301	3		
Total	17	Total	16

FOURTH YEAR

		Process Dynamics & Control 0906.405	3
Transport Phenomena 0906.402	3	Unit Operations Lab 0906.403	3
Approved Chem. Eng. Elec. I ² 0906.XXX	3	Approved Chem. Eng. Elec. II ² 0906.XXX	3
Senior Engineering Clinic I ³ 0901.401	2	Senior Engineering Clinic II ³ 0901.402	2
Chem. Process Component Design 0906.401	4	Approved Chemistry Elective ¹	3
General Education	3	Chemical Plant Design 0906.406	3
Total	15	Total	17

TOTAL 133

Notes:

1. Required/Approved Courses taken to satisfy ABET category of "Advanced Chemistry "

May be exchanged with ChE Elective in Fall.

Course must come from a list of approved courses provided by the Ch.E. Chair.

2. Required/Approved courses taken to satisfy Chemical Engineering ABET categories/ AIChE electives.

Courses must be taken from a list of approved courses provided by the Ch.E. Chair.

One of these courses must have substantial advanced chemistry content.

Technical electives may be taken in either semester of Senior year.

3. Junior/Senior Clinics are a project-based experience

Projects must be approved by a ChE Projects Committee and are writing intensive (WI) courses.

CHEMICAL ENGINEERING CURRICULUM - 2001

Sept 1 1998

revised by ChE Curriculum Committee (R.P. Hesketh, Z. O. Keil, S. Farrell, J. Newell, C.S.Slater)

FIRST YEAR

Composition I 1501.111	3	Calculus II 1701.131	4
Calculus I 1701.130	4	Computer Sci & Program. 0704.103	4
Chemistry I 1906.100	4	Fresh. Engineering Clinic II 0901.102	3
Fresh. Engineering Clinic I 0901.101	3	Physics I 1902.200	4
General Education	3	General Education	3
Total	17	Total	18

SECOND YEAR

Principles Chemical Processes I 0906.201	2	Math for Engineering Anal II 1701.335	4
Math for Engineering Anal I 1701.334	4	Principles Chemical Processes II 0906.302	2
Physics II or Biology I 1902.201 / 0401.100	4	Fluid Mechanics I 0901.341	2
Chemistry II 1906.101	4	Soph. Engineering Clinic II 0901.202	4
Soph. Engineering Clinic I 0901.201	4	Organic Chemistry I 1907.200	4
Total	18	Total	16

THIRD YEAR

Microeconomics 2204.102	3		
Process Fluid Transport 0906.309	2	General Education	3
Transfer Processes I - Heat 0906.311	2	Chem. Engineering Thermo. 0906.310	3
Transfer Processes II - Mass 0906.312	2	Junior Engineering Clinic II ³ 0901.302	2
Engineering Materials I 0901.281	2	Chemical Reaction Engineering 0906.316	4
Physical Chemistry I 1908.400	3	Separation Processes 0906.314	4
Junior Engineering Clinic I ³ 0901.301	2		
Total	16	Total	16

FOURTH YEAR

		Process Dynamics & Control 0906.405	3
Transport Phenomena 0906.402	3	Unit Operations Lab 0906.403	3
Approved Chem. Eng. Elec. I ² 0906.XXX	3	Approved Chem. Eng. Elec. II ² 0906.XXX	3
Senior Engineering Clinic I ³ 0901.401	2	Senior Engineering Clinic II ³ 0901.402	2
Chem. Process Component Design 0906.401	4	Approved Chemistry Elective ¹	3
General Education	3	Chemical Plant Design 0906.406	3
Total	15	Total	17

TOTAL 133

Notes:

1. Required/Approved Courses taken to satisfy ABET category of "Advanced Chemistry "
May be exchanged with ChE Elective in Fall.

Course must come from a list of approved courses provided by the Ch.E. Chair.

2. Required/Approved courses taken to satisfy Chemical Engineering ABET categories/ AIChE electives.

Courses must be taken from a list of approved courses provided by the Ch.E. Chair.

One of these courses must have substantial advanced chemistry content.

Technical electives may be taken in either semester of Senior year.

3. Junior/Senior Clinics are a project-based experience

Projects must be approved by a ChE Projects Committee and are writing intensive (WI) courses.

CHEMICAL ENGINEERING CURRICULUM - 2002

Sept 1 1998

revised by ChE Curriculum Committee (R.P. Hesketh, Z. O. Keil, S. Farrell, J. Newell, C.S.Slater)

FIRST YEAR

Composition I 1501.111	3	Calculus II 1701.131	4
Calculus I 1701.130	4	Computer Sci & Program. 0704.103	4
Chemistry I 1906.100	4	Fresh. Engineering Clinic II 0901.102	2
Fresh. Engineering Clinic I 0901.101	2	Physics I 1902.200	4
General Education	3	General Education	3
Total	16	Total	17

SECOND YEAR

Principles Chemical Processes I 0906.201	2	Math for Engineering Anal II 1701.335	4
Math for Engineering Anal I 1701.334	4	Principles Chemical Processes II 0906.302	2
Physics II or Biology I 1902.201 / 0401.100	4	Fluid Mechanics I 0901.341	2
Chemistry II 1906.101	4	Soph. Engineering Clinic II 0901.202	4
Soph. Engineering Clinic I 0901.201	4	Organic Chemistry I 1907.200	4
Total	18	Total	16

THIRD YEAR

Microeconomics 2204.102	3	General Education	3
Process Fluid Transport 0906.309	2	Chem. Engineering Thermo. 0906.310	3
Transfer Processes I - Heat 0906.311	2	Junior Engineering Clinic I ³ 0901.302	2
Transfer Processes II - Mass 0906.312	2	Chemical Reaction Engineering 0906.316	4
Material Science 0901.281	2	Separation Processes 0906.314	4
Physical Chemistry I 1908.400	3		
Junior Engineering Clinic I ³ 0901.301	2		
Total	16	Total	16

FOURTH YEAR

Transport Phenomena 0906.402	3	Process Dynamics & Control 0906.405	3
Approved Chem. Eng. Elec. I ² 0906.XXX	3	Unit Operations Lab 0906.403	3
Senior Engineering Clinic I ³ 0901.401	2	Approved Chem. Eng. Elec. II ² 0906.XXX	3
Chem. Process Component Design 0906.401	4	Senior Engineering Clinic II ³ 0901.402	2
General Education	3	Approved Chemistry Elective ¹	3
Total	15	Chemical Plant Design 0906.406	3
		Total	17

TOTAL 131

Notes:

1. Required/Approved Courses taken to satisfy ABET category of "Advanced Chemistry "

May be exchanged with ChE Elective in Fall.

Course must come from a list of approved courses provided by the Ch.E. Chair.

2. Required/Approved courses taken to satisfy Chemical Engineering ABET categories/ AIChE electives.

Courses must be taken from a list of approved courses provided by the Ch.E. Chair.

One of these courses must have substantial advanced chemistry content.

Technical electives may be taken in either semester of Senior year.

3. Junior/Senior Clinics are a project-based experience

Projects must be approved by a ChE Projects Committee and are writing intensive (WI) courses.

CHEMICAL ENGINEERING CURRICULUM - 2003

Sept 1 1998

revised by ChE Curriculum Committee (R.P. Hesketh, Z. O. Keil, S. Farrell, J. Newell, C.S. Slater)

FIRST YEAR

Composition I 1501.111	3	Calculus II 1701.131	4
Calculus I 1701.130	4	Computer Sci & Program. 0704.103	4
Advanced College Chemistry I 1906.1XX	4	Fresh. Engineering Clinic II 0901.102	2
Fresh. Engineering Clinic I 0901.101	2	Physics I 1902.200	4
General Education	3	General Education	3
Total	16	Total	17

SECOND YEAR

Principles Chemical Processes I 0906.201	2	Math for Engineering Anal II 1701.335	4
Math for Engineering Anal I 1701.334	4	Principles Chemical Processes II 0906.302	2
Physics II or Biology I 1902.201 / 0401.100	4	Fluid Mechanics I 0901.341	2
Advanced College Chemistry II 1906.1XX	4	Soph. Engineering Clinic II 0901.202	4
Soph. Engineering Clinic I 0901.201	4	Organic Chemistry I 1907.200	4
Total	18	Total	16

THIRD YEAR

Microeconomics 2204.102	3		
Process Fluid Transport 0906.309	2	General Education	3
Transfer Processes I - Heat 0906.311	2	Chem. Engineering Thermo. 0906.310	3
Transfer Processes II - Mass 0906.312	2	Junior Engineering Clinic II ³ 0901.302	2
Material Science 0901.281	2	Chemical Reaction Engineering 0906.316	4
Physical Chemistry I 1908.400	3	Separation Processes 0906.314	4
Junior Engineering Clinic I ³ 0901.301	2		
Total	16	Total	16

FOURTH YEAR

		Process Dynamics & Control 0906.405	3
Transport Phenomena 0906.402	3	Unit Operations Lab 0906.403	3
Approved Chem. Eng. Elec. I ² 0906.XXX	3	Approved Chem. Eng. Elec. II ² 0906.XXX	3
Senior Engineering Clinic I ³ 0901.401	2	Senior Engineering Clinic II ³ 0901.402	2
Chem. Process Component Design 0906.401	4	Approved Chemistry Elective ¹	3
General Education	3	Chemical Plant Design 0906.406	3
Total	15	Total	17

TOTAL 131

Notes:

1. Required/Approved Courses taken to satisfy ABET category of "Advanced Chemistry "
May be exchanged with ChE Elective in Fall.

Course must come from a list of approved courses provided by the Ch.E. Chair.

2. Required/Approved courses taken to satisfy Chemical Engineering ABET categories/ AIChE electives.

Courses must be taken from a list of approved courses provided by the Ch.E. Chair.

One of these courses must have substantial advanced chemistry content.

Technical electives may be taken in either semester of Senior year.

3. Junior/Senior Clinics are a project-based experience

Projects must be approved by a ChE Projects Committee and are writing intensive (WI) courses.