



## *Undergraduate Advising*

### *Ralph E. Martin Department of Chemical Engineering*

Revised: May, 2009

The Educational Objectives of our chemical engineering program are to prepare students for career and professional accomplishments after graduation, including:

- Successfully practicing as an engineer or in some other professional pursuit, including traditional or emerging fields of chemical engineering.
- Entering and successfully participating in a graduate or professional program that continues career development.

Our chemical engineering program prepares graduates to achieve these educational objectives through the development of their skills as outlined in our educational outcomes and taught in our curriculum. In support of our Educational Objective, our curriculum includes a foundation in mathematics and the basic sciences, the humanities and social sciences, engineering sciences, engineering design methods, and specific chemical engineering skills such as mass and energy balances, single and multi-component thermodynamics, basic fluid mechanics, heat and mass transfer operations, process economics, process design, process safety, process control, and laboratory practice. Our curriculum recognizes the importance of biology and biochemistry by applying chemical engineering principles to these systems within the context of required chemical engineering coursework and potential research experiences that are available to undergraduate students.

The purpose of this document is to outline the undergraduate program of study, including pre- and co-requisites, as well as the other requirements for graduation, to serve as an advising tool for students and faculty.

### **Program of Study**

The four-year suggested program of study for Chemical Engineering students not participating in the Freshman Engineering program is shown as a course sequence diagram in Figure 1 and as a listing of courses in Table 1. This program of study is used by transfer students and freshmen entering the program in CHEG 1113 (not the Freshmen Engineering Program). Note that all courses are not offered each semester and that certain pre- and co-requisites are required for most courses. It is realized that students progress through the curriculum at different rates. It is the responsibility of both the student and his/her advisor to carefully plan a student's schedule of classes to balance course offerings with the required pre- and co-requisites.

Table 1. Suggested Program of Study  
for Transfer Students or Students Entering Chemical Engineering in their Freshman Year

<p><b>Fall Semester Year 1</b>            4 MATH 2554 Calculus I            3 CHEM 1123 University Chemistry II            1 CHEM 1121L University Chemistry II Lab            3 ENGL 1013 Composition I            3 CHEG 1113 Introduction to Chemical Engineering I            3 HIST 2003 Hist./American People to 1877 (HIST 2013 or PLSC 2003 may be substituted)  <b>17 Semester hours</b></p>	<p><b>Spring Semester Year 1</b>            4 MATH 2564 Calculus II            3 CHEG 1123 Introduction to Chemical Engineering II            3 ENGL 1023 Composition II            2 CHEG 1212L Chemical Engineering Lab I            3 Humanities/social science core elective  <b>15 Semester hours</b></p>
<p><b>Fall Semester Year 2</b>            4 MATH 2574 Calculus III            3 CHEM 3603 Organic Chemistry I            1 CHEM 3601L Organic Chemistry I Lab            4 PHYS 2054 University Physics I            0 PHYS 2050L University Physics Lab I            1 CHEG 2221 Professional Practice Seminar            3 CHEG 2313 Thermodynamics of Single Component Systems  <b>16 Semester hours</b></p>	<p><b>Spring Semester Year 2</b>            4 MATH 3404 Differential Equations            3 CHEM 3613 Organic Chemistry II            1 CHEM 3611L Organic Chemistry II Lab            4 PHYS 2074 University Physics II            0 PHYS 2070L University Physics II Lab            3 CHEG 2133 Fluid Mechanics            3 CHEG 3323 Thermodynamics of Multi-component Systems  <b>18 Semester hours</b></p>
<p><b>Fall Semester Year 3</b>            4 CHEM Elective            3 MEEG 2003 Statics            3 CHEG 3143 Heat Transport            2 CHEG 3232L Chemical Engineering Lab II            3 CHEG 3253 Chemical Engineering Computer Methods            3 Humanities/social science core elective  <b>18 Semester hours</b></p>	<p><b>Spring Semester Year 3</b>            4 CHEM Elective            3 MEEG 3013 Mechanics of Materials            3 CHEG 3333 Chemical Engineering Reactor Design            3 CHEG 3153 Non-equilibrium Mass Transfer            3 ECON 2143 Basic Economics (ECON 2013, Principles of Macroeconomics, may be substituted)            0 ENGL 2003 Advanced Composition or Exemption  <b>16 Semester hours</b></p>
<p><b>Fall Semester Year 4</b>            3 CHEG 4163 Equilibrium Stage Mass Transfer            3 CHEG 4413 Chemical Engineering Design I            3 CHEG 4813 Chemical Process Safety            3 Technical elective            3 Humanities/social science core elective  <b>15 Semester hours</b></p>	<p><b>Spring Semester Year 4</b>            2 CHEG 4332L Chemical Engineering Lab III            3 CHEG 4443 Chemical Engineering Design II            3 ELEG 3903 Electric Circuits and Machines            3 CHEG 4423 Automatic Process Control            3 Technical elective            3 Humanities/social science core elective  <b>17 Semester hours</b></p>

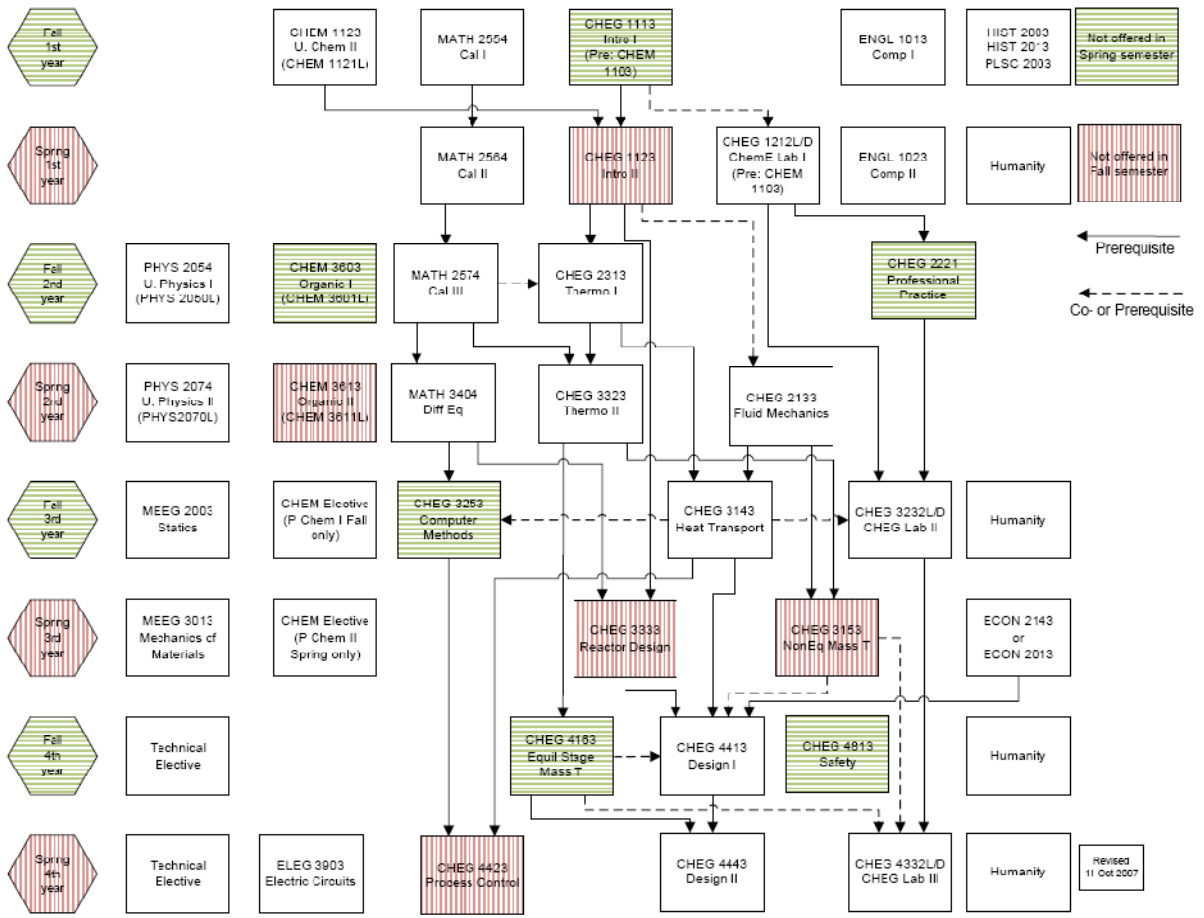


Figure 1. Suggested Program of Study for Transfer Students or Students Entering Chemical Engineering in their Freshman Year

The four-year suggested program of study for Chemical Engineering students participating in the Freshman Engineering program is shown as a course sequence diagram in Figure 2 and as a listing of courses in Table 2. This program of study is used by freshmen entering the program through the Freshmen Engineering Program. Once again, note that all courses are not offered each semester and that certain pre- and co-requisites are required for most courses. It is realized that students progress through the curriculum at different rates. It is the responsibility of both the student and his/her advisor to carefully plan a student’s schedule of classes to balance course offerings with the required pre- and co-requisites.

Table 2. Suggested Program of Study  
for Students Beginning in Freshman Engineering

<b>Fall Semester Year 1</b> 4 MATH 2554 Calculus I 3 CHEM 1103 University Chemistry I 3 ENGL 1013 Composition I 4 PHYS 2054 University Physics I 0 PHYS 2050L University Physics Lab I 1 GNEG 1111 Introduction to Engineering I <b>15 Semester hours</b>	<b>Spring Semester Year 1</b> 4 MATH 2564 Calculus II 3 CHEM 1123 University Chemistry II 1 CHEM 1121L University Chemistry II Lab 3 ENGL 1023T Technical Composition II 1 GNEG 1121 Introduction to Engineering I 3 HIST 2003 Hist./American People to 1877 (HIST 2013 or PLSC 2003 may be substituted) <b>15 Semester hours</b>
<b>Fall Semester Year 2</b> 4 MATH 2574 Calculus III 3 CHEM 3603 Organic Chemistry I 1 CHEM 3601L Organic Chemistry I Lab 4 PHYS 2074 University Physics II 0 PHYS 2070L University Physics II Lab 3 CHEG 1113 Introduction to Chemical Engineering I 3 Humanities/social science core elective <b>18 Semester hours</b>	<b>Spring Semester Year 2</b> 4 MATH 3404 Differential Equations 3 CHEM 3613 Organic Chemistry II 1 CHEM 3611L Organic Chemistry II Lab 3 CHEG 1123 Introduction to Chemical Engineering II 2 CHEG 1212L Chemical Engineering Lab I 3 CHEG 2133 Fluid Mechanics 3 ECON 2143 Basic Economics (ECON 2013, Principles of Macroeconomics, may be substituted) <b>19 Semester hours</b>
<b>Fall Semester Year 3</b> 4 CHEM Elective 3 MEEG 2003 Statics 1 CHEG 2221 Professional Practice Seminar 3 CHEG 2313 Thermodynamics of Single Component Systems 6 Humanities/social science core electives <b>17 Semester hours</b>	<b>Spring Semester Year 3</b> 4 CHEM Elective 3 MEEG 3013 Mechanics of Materials 3 CHEG 3143 Heat Transport 2 CHEG 3232L Chemical Engineering Lab II 3 CHEG 2313 Thermodynamics of Single Component Systems 3 CHEG 3333 Chemical Engineering Reactor Design 0 ENGL 2003 Advanced Composition or Exemption <b>18 Semester hours</b>
<b>Summer Semester Year 3</b> 3 CHEG 3153 Non-equilibrium Mass Transfer <b>3 Semester hours</b>	
<b>Fall Semester Year 4</b> 3 CHEG 3253 Chemical Engineering Computer Methods 3 CHEG 4163 Equilibrium Stage Mass Transfer 3 CHEG 4413 Chemical Engineering Design I 3 CHEG 4813 Chemical Process Safety 3 Technical elective <b>15 Semester hours</b>	<b>Spring Semester Year 4</b> 2 CHEG 4332L Chemical Engineering Lab III 3 CHEG 4443 Chemical Engineering Design II 3 ELEG 3903 Electric Circuits and Machines 3 CHEG 4423 Automatic Process Control 3 Technical elective 3 Humanities/social science core elective <b>17 Semester hours</b>

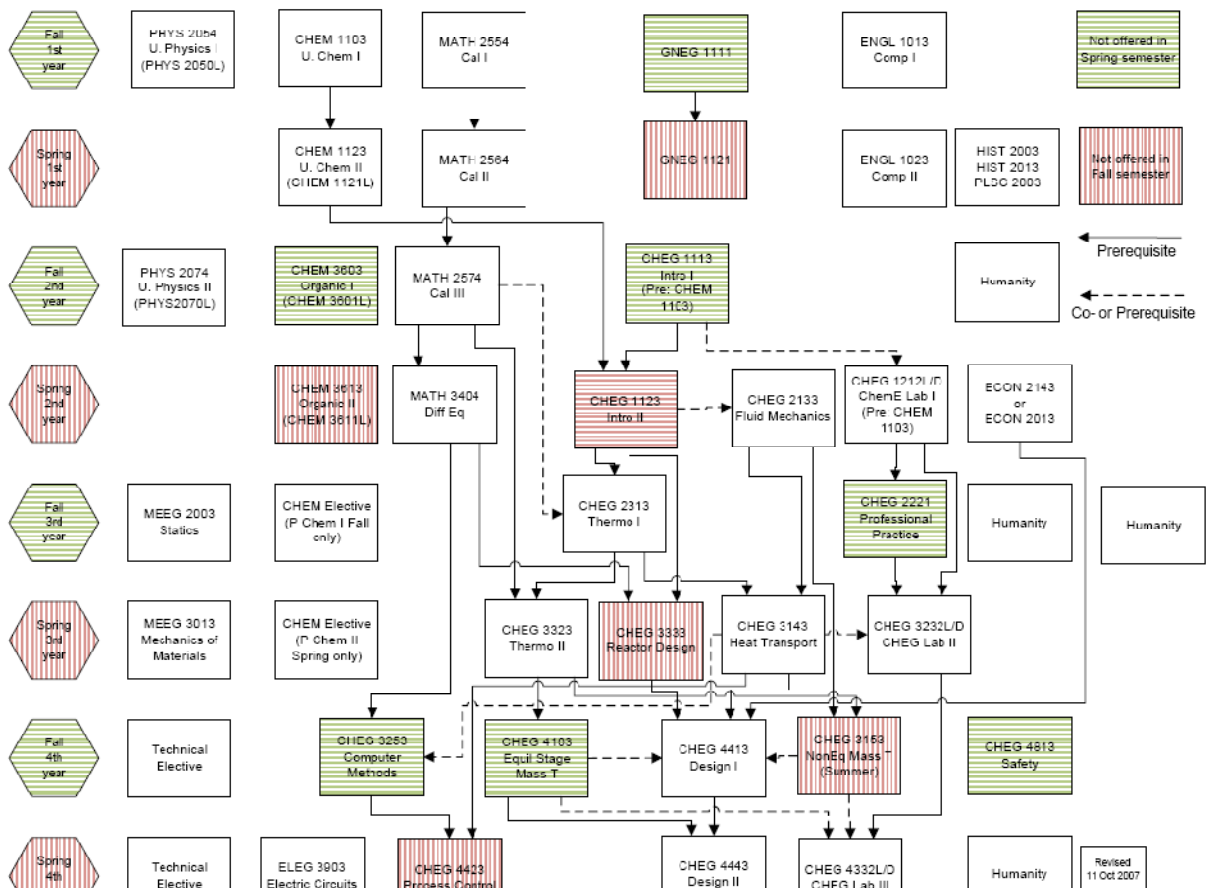


Figure 2. Suggested Program of Study for Students Beginning in Freshman Engineering

## Humanities and Social Science Electives

### The Requirements

- All students are required to take HIST 2003, HIST 2013 or PLSC 2003.
- Of the 15 hours of Humanities and Social Elective courses that remain,
  - SIX hours MUST be in HUMANITIES from the approved list.
  - NINE hours MUST be in SOCIAL SCIENCES from the approved list. Since ECON 2143 or ECON 2013 is specifically required in the Chemical Engineering degree program, only SIX additional hours are required.
  - TWO or more academic departments MUST be included in each category. Note that ARCH 1003, ARHS 1003, ARTS 1003, COMM 1003, DANC 1003, DRAM 4332L/D, HUMN 1003, LARC 1003 and MLIT 1003 are all part of the Fine Arts (FNAR) Department.
  - SIX hours MUST be 3XXX-level or above.

### Approved Courses

A listing of the approved lower-level (1XXX- and 2XXX-level) humanities/social science electives may be found on the College of Engineering web site at <http://www.engr.uark.edu/545.php>. A listing of the approved upper-level (3XXX-level and above) humanities/social science electives may be found on the College of Engineering web site at <http://www.engr.uark.edu/534.php>.

#### A Simple Example

A recent Chemical Engineering student took the following courses to satisfy the Humanities/Social Science requirements:

- HIST 2003, History of the American People to 1877
- ECON 2143, Basic Economics: Theory and Practice
- COMM 1003, Film Lecture
- PSYC 2003, General Psychology
- PHIL 3103, Ethics and the Professions
- HUMN 3163 (also listed as SCWK 3163), On Death and Dying

HIST 2003 fulfills the State of Arkansas requirement requiring either HIST 2003, HIST 2013 or PLSC 2003. The six hour Humanities requirement is fulfilled by COMM 1003 (a FNAR Department course) and PHIL 3103, courses that are from two different academic departments. The nine hour Social Science requirement is fulfilled by ECON 2143 (required in Chemical Engineering), PSYC 2003 and HUMN 3163 (or SCWK 3163), courses that are, once again, from at least two different academic departments. Note that HUMN 3163 (or SCWK 3163) can be used either as a Humanities elective or a Social Science elective, and this student chose to use it as a Social Science elective. The six hour 3XXX requirement is fulfilled by PHIL 3103 and HUMN 3163 (or SCWK 3163).

## Technical Electives

Six hours of technical electives are required in the Chemical Engineering curriculum. In general, any upper level (3XXX-level or above) course in the sciences, math or engineering may serve as a technical elective, with prior approval by your academic advisor. BIOL 2013, BIOL 2213, BIOL 2323 and BIOL 2443 are 2XXX-level courses that can also serve as technical electives, and are also useful for students applying to medical school. Upper-level courses in non-technical areas such as business may also serve as technical electives with prior approval by your academic advisor. There is no specific list of approved technical electives.

## Upper Level Chemistry/Physics Courses

Eight hours of upper level chemistry/physics courses, as selected from the approved list in Table 3, are required in the Chemical Engineering curriculum. Courses not on the list *may* satisfy the requirement with student appeal and approval by the Chemical Engineering faculty.

Table 3. Approved List of Upper Level Chemistry/Physics Courses  
(approved by Departmental faculty, August, 2008)

- CHEM 2262, Analytical Chemistry Lecture
- CHEM 2272, Analytical Chemistry Laboratory
- CHEM 3451L, Elements of Physical Chemistry Laboratory (note co-requisite of CHEM 3453)
- CHEM 3453, Elements of Physical Chemistry (course not allowed with CHEM 3504 or CHEM 3514; do not have to also enroll in CHEM 3451L)

- CHEM 3504, Physical Chemistry
- CHEM 3514, Physical Chemistry II
- CHEM 3813, Introduction to Biochemistry (not allowed with CHEM 4813H or CHEM 4843H)
- CHEM 4123, Advanced Inorganic Chemistry I
- CHEM 4211L, Instrumental Analysis Laboratory (note co-requisite of CHEM 4213)
- CHEM 4213, Instrumental Analysis (do not have to also enroll in CHEM 4211L)
- CHEM 4813H, Biochemistry I (CHEM 3514 pre-requisite waived)
- CHEM 4843H, Biochemistry II
- CHEM 4853, Biochemical Techniques
- FDSC 4304, Food Chemistry
- PHYS 3113, Analytical Mechanics
- PHYS 3414, Electromagnetic Theory
- PHYS 3544, Optics
- PHYS 3614, Modern Physics
- PHYS 4333, Thermal Physics
- PHYS 4621L, Modern Physics Laboratory
- PHYS 4734, Introduction to Laser Physics

## Advanced Composition Requirement

All students at the University of Arkansas are required to take and pass ENGL 2003, Advanced Composition, unless exempted by:

- demonstrating satisfactory writing ability on the Advanced Composition Exemption Examination,
- completing ENGL 2013, Essay Writing, or
- achieving a grade of “A” or “B” in ENGL 1013, and a grade of “A” in ENGL 1023 *in courses taken at the University of Arkansas, Fayetteville.*

Degree credit is not given for ENGL 2003.

Students must pass ENGL 1013 and ENGL 1023, and must complete 30 credit hours of courses, before taking the Advanced Composition Exemption Exam. Furthermore, the exam must be taken before the student has acquired 96 credit hours. Junior and senior transfer students must take the examination at the time they enter the University of Arkansas. The examination is graded as either pass or fail. Students who take, but do not pass the Exemption Exam, must take ENGL 2003. Students not gaining exemption from ENGL 2003 must register for the course before the last semester of their senior year.

## Courses Satisfying the ENGL 1013 and ENGL 1023 Exemption

Some students entering the University of Arkansas are *exempted* from ENGL 1013 and ENGL 1023 because of high ACT scores, but do not receive credit for the courses. Credit for ENGL 1013 and ENGL 1023 upon entering the university usually comes from AP or CLEP credit, or from the transfer of the classes from another university. The ENGL 1013/ENGL 1023 exemption can be satisfied by six hours of any non-remedial courses.

## Transfer Credit Rules

Transfer credits from other institutions are evaluated by the Registrar's Office, in conjunction with the Engineering Dean's office and the Department of Chemical Engineering. Grades earned at other institutions are not used in calculating a student's grade point average at the University of Arkansas. Several rules apply regarding transfer credit:

- No "D" grades are allowed for transfer credit
- No more than 68 hours of lower division (1XXX-, 2XXX-level) courses can be transferred
- Courses that satisfy the State Minimum Core (SMC) at another institution of higher learning in Arkansas, typically shown as 299TT courses, are fully transferrable to the University of Arkansas, assuming a grade of "C" or better
- There is no limit on the number of upper division (3XXX-level or above) courses that may be transferred to the University of Arkansas, but transfer students must also satisfy the Residence Requirement (see U of A catalog for more information)
- The Chemical Engineering Department has the final say on whether courses may transfer for credit to the University of Arkansas with one major exception—humanities/social electives. The transfer for credit of all lower and upper level humanities/social science electives must be approved by either the Registrar's office or a committee of the College of Engineering

## Courses that do not Count toward Degree Requirements

0003 courses, MATH 1203, MATH 1213, MATH 1285 and ENGL 2003 cannot be counted toward the requirements for an engineering degree

## Student Advising

All Chemical Engineering students will be required to meet with their academic advisor prior to removal of the advising hold and being allowed to sign up for courses. Students on co-op may be allowed to satisfy this requirement by e-mail, at the discretion of the advisor.

To initiate the advising process, students are requested to copy the appropriate advising sheet (Appendix A for students who entered Chemical Engineering as freshman or as transfer students, or Appendix B for students who entered Chemical Engineering from the Freshman Engineering program), and simply "X" out the courses they have taken or are presently taking. As a second step, the student is requested to list the humanities/social electives and technical electives that he/she has taken or is taking in the appropriate categories. As a final step, the students are requested to "circle" the courses they plan to take in the next semester. If a student is to be advised in the Spring for both the summer and fall semesters, write an "S" in the appropriate circles for summer and an "F" in the appropriate circles for fall. The student should always be looking ahead to foresee potential pitfalls with courses that might occur in later semesters, and your advisor will often help you plan out schedules for several subsequent semesters. If a student does not know which courses to take or would like to discuss course offerings with his/her advisor, simply stop the process after placing an "X" in the courses that have been taken and after listing the humanities/social electives and technical electives that have been taken. As was noted above, it is the responsibility of both the student and his/her advisor to carefully plan the student's schedule of classes to balance course offerings with the required pre- and co-requisites. This does not mean that pre- and co-requisites will *never* be violated, but it does mean that significant efforts

should and will be made to *avoid pre- and co-requisite violations* because the pre- and co-requisites are carefully set by the faculty to facilitate student success in courses.

Honors students should also fill out the Honors Program Plan of Study (Appendix C), a study plan for completing Honors courses, and the Honors Thesis/Project Proposal form (also in Appendix C). The Honors Thesis/Project Proposal form is due in the Engineering Dean's Office 15 months prior to graduation. For more details on the Honors program and required forms, see the Departmental Honors Program Guidance document, found on the Departmental website.

The student brings the appropriate advising/Honors College form(s) to a meeting with his/her academic advisor. In general, this will be Dr. Clausen, who is best contacted by e-mail ([eclause@uark.edu](mailto:eclause@uark.edu)) to set up an appointment. This subsequent meeting may be very short if the scheduling of classes is straightforward, or may be a bit lengthy if the student is having trouble scheduling classes. In general, this is not the best time to get into lengthy advising discussions, but this is a time to set up a time for later lengthy advising discussions. After discussing the class schedule and listing of Honors courses, the advisor will remove the advising hold, which will permit the student to sign up for classes. If the student is required to make changes to the schedule due to conflicts, the student should communicate this information to his/her advisor.

## Degree Check

Prior to the start of a student's final semester before graduation, he/she should make arrangements with Dr. Clausen ([eclause@uark.edu](mailto:eclause@uark.edu)) for a degree check, which will ensure that the student will satisfy all requirements for graduation. The degree check is a course by course match of degree requirements with courses taken at the university, transfer courses and credit courses. It is also an opportunity to make sure that the student's grade point average is sufficient for graduation. The result of the degree check is a list of courses still required for graduation, and any questions regarding grade point average, transfer credit, etc. This information will be transmitted to the student by e-mail for follow-up, if necessary. The degree check is completed prior to the last semester so that the student will have an opportunity to complete any courses that may have initially been a surprise to the student. A degree check form is shown in Appendix D, *for information only*.

## Requirements for Graduation

The Engineering Dean's office will be making sure that each student meets the following graduation requirements. Consult the catalog for clarification and any additional requirements:

- The student's cumulative grade point average must be  $\geq 2.0$
- The student's cumulative grade point average in engineering courses must be  $\geq 2.0$
- The student's cumulative grade point average in the Chemical Engineering Department must be  $\geq 2.0$
- Of the courses taken on this campus, <15% of the hours may be "D" grades
- The total hours taken must be  $\geq$  the required hours (132 hours in the Chemical Engineering Department)
- The student must complete the State Minimum Core (SMC):
  - English (6 hours—ENGL 1013, ENGL 1023 or waived by ACT score)
  - Mathematics (3 hours)

- Science (8 hours)
- Humanities (6 hours—two different departments)
- Social Science (9 hours—two different departments)
- U.S. History/American Government course
- The student must complete 6 hours of upper level (3XXX-level or above) humanities/social elective courses
- The student must satisfy the Advanced Composition Requirement, as detailed above
- The ENGL 1013 and ENGL 1023 Exemption must not be satisfied by remedial coursework
- No 0003 courses, MATH 1203, MATH 1213, MATH 1285 and ENGL 2003 are counted toward the requirements for an engineering degree
- No “D” grades are transferred into the University of Arkansas
- No more than 68 hours of lower division (1XXX-, 2XXX-level) courses are transferred into the University of Arkansas
- The residence requirement is satisfied
- All departmental course requirements are satisfied
- The degree check has been made, and all subsequent requirements (courses, no “D” grades, etc.) have been met

## **APPENDICES**

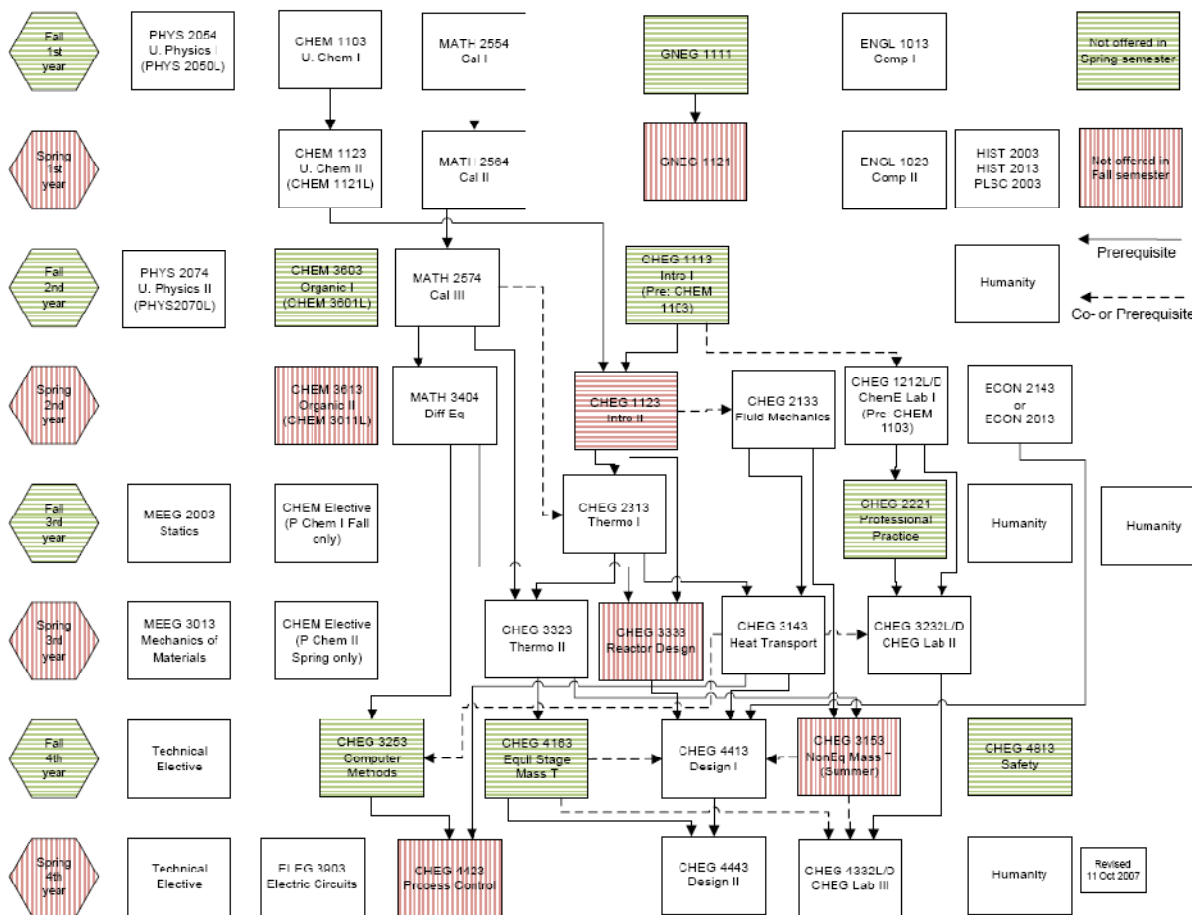
### **FORMS**



**University of Arkansas**  
**Ralph E. Martin Department of Chemical Engineering**

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Semester: \_\_\_\_\_

“X” out the courses you have passed, or are taking; circle the classes you are planning to take



**HSS Electives (18 hr)**

1. HIST 2003, 2013 or PLSC 2003
2. Hum 1: \_\_\_\_\_
3. Hum 2: \_\_\_\_\_
4. Soc Sci 1: ECON 2143 or ECON 2013
5. Soc Sci 2: \_\_\_\_\_
6. Soc Sci 3: \_\_\_\_\_

**Technical Electives (6 hr)**

1. \_\_\_\_\_
2. \_\_\_\_\_

**Upper Level Chem/Physics (8 hr)**

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

Revised  
11 Oct 2007

## UNIVERSITY OF ARKANSAS

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Ralph E. Martin Department of Chemical Engineering

## Honors Program Plan of Study

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Class: (circle Fr, So, Jr, Sr) Expected Graduation: \_\_\_\_\_

Do you also plan to graduate with Honors in an additional academic program? \_\_\_\_

If so, which program? \_\_\_\_\_

**Honors Program of Study.** In Chemical Engineering, the Honors Program requirements consist of course work and thesis requirements. At least 12 hours of Honors courses are required to graduate with Honors with at least 6 hours of Honors classes taken in Chemical Engineering. In addition, an Honors research or design project must be selected by the student, and an Honors thesis must be prepared by the student and approved by the faculty. Thesis credit will be satisfied in one of the following ways:

- completion of the AIChE Design Problem individually by contest rules as part of CHEG 4443, Design II
- completion of a design contest problem as part of a team, such as the WERC or EPA-P<sup>3</sup> competitions in CHEG 4443, Design II
- completion of an Honors Thesis at the direction of a faculty mentor (such as would be completed associated with the SURF/SILO program).

Honors thesis projects are performed under the direction of a faculty mentor with the approval of the Department Honors Committee. Regardless of the thesis project, a summary report and oral presentation will be prepared by the student. A formal proposal for the thesis project must be filed with the Dean's office at least two semesters before graduation (so that to graduate with Honors in May, the thesis proposal must have been approved by the department and filed with the Dean's office by May of the previous year).

**1. Completed Honors Courses**

Course	Hours	Date Completed

**2. Proposed Honors Classes**

Course	Hours	Date to be Completed

**3. Have you received or do you plan to obtain a SURF/SILO or Honors Research Fellowship?**  
(Describe project/proposed project, including advisor)

**4. Proposed Honors Project** (subject to change)

The Honors Thesis/Project Proposal form, Library Transmittal form, the Honors Paper/Thesis Duplication Release and the Honors College Graduation Certification form are found at <http://www.engr.uark.edu/1186.php>.



## Undergraduate Advising—Appendix D

CHEG 3153 Mass I									
ECON 2143 Basic Econ									18
CHEG 4163 Mass II									
CHEG 4413 Design I									
CHEG 4423 Proc Con									
CHEG 4813 Safety									
CHEG 4332 Lab III									
CHEG 4443 Design II									
ELEG 3903 Circuits									
<b>Technical Electives</b>	<b>Semester</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>T</b>	<b>CR</b>	<b>Comments &amp; Trans. Info</b>	
6 CREDIT HOURS									
<b>Humanities/Social Electives</b>	<b>Semester</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>T</b>	<b>CR</b>	<b>Comments &amp; Trans. Info</b>	
15 CREDIT HOURS									
Hist/Gov									
3000+									
3000+									

Courses to be completed after degree check:

- |          |           |              |
|----------|-----------|--------------|
| 1. _____ | 8. _____  | OTHER: _____ |
| 2. _____ | 9. _____  | _____        |
| 3. _____ | 10. _____ | _____        |
| 4. _____ | 11. _____ | _____        |
| 5. _____ | 12. _____ | _____        |
| 6. _____ | 13. _____ | _____        |
| 7. _____ | 14. _____ | _____        |

Curriculum requirements completed subject to satisfactory completion of courses listed above:

\_\_\_\_\_  
 Advisor's Signature                      Date

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GENERAL UNIVERSITY REQUIREMENTS (Checked and approved by Dean's Office)

Junior English fulfilled? \_\_\_\_\_ American History / Gov't fulfilled? \_\_\_\_\_ H/FA 6 hrs \_\_\_\_\_

Social Sci 9 hrs \_\_\_\_\_ Hours of "D"? \_\_\_\_\_ % of total UAF hours \_\_\_\_\_