CHEMICAL ENGINEERING

COLLEGE: ENGINEERING
SCHOOL: NONE
DEGREE: BACHELOR OF SCIENCE IN CHEMICAL ENGINEERING
OPTION/TRACK: NONE

LIMITED ACCESS PROGRAM: NO.

CAMPUS(ES) WHERE OFFERED/CONTACT:
TAMPA / Coordinator of Advising, Engineering, (813) 974-2884
LAKELAND (Partial) / Advisor, Engineering, (941) 667-7011
SARASOTA (Partial) / Advisor, Engineering, (941) 359-4331

• Program of Study at a Florida Community/Junior College or SUS School for Students Planning to Transfer to USF
(State Mandated Common Prerequisites)

If a student wishes to transfer without an A.A. degree and has fewer than 60 semester hours of acceptable credit, the student must meet the university’s entering freshman requirements including ACT or SAT test scores, GPA, and course requirements.

Students should complete the following prerequisite courses listed below at the lower level prior to entering the University. If these courses are not taken at the community college, they must be completed before the degree is granted. Unless stated otherwise, a grade of "C" is the minimum acceptable grade.

Some courses required for the major may also meet General Education Requirements thereby transferring maximum hours to the university.

The following are transferable courses from the Community College that will be accepted in the Math/Science/Engineering areas:

Communications:
ENC 1101/1102 English I and II (6)

Humanities & Social Sciences:
- Humanities Courses (6)
- Social Science Courses (6)
- Humanities or Social Sciences (3)

Mathematics:
USF C/C
- MAC 2281
- MAC 2282
- MAC 2283
- MAP 2302
*or MAC 2281, MAC 2282, MAC 2283

Natural Sciences:
USF C/C
- CHM 2045
- PHY 2048
- PHY 2048L
- PHY 2049
- PHY 2049L
*or CHS 1440 Chemistry for Engineers

Please be aware of the immunization, foreign language, continuous enrollment policies of the university, and qualitative standards required.

• Procedures for Applying to the College of Engineering

Before declaring a particular major within the field of engineering, students must meet two sets of admission requirements: one for the College of Engineering and the other for the student’s chosen degree program (see “College of Engineering Admission Requirements” and “Admission Requirements for Programs in Engineering” below). Students may apply to the College of Engineering upon initial entry to the University by declaring Engineering as their intended major on their admissions application. When a student is accepted to USF, engineering staff will review the necessary credentials and notify the applicant of his or her Engineering status.

USF students may apply through the Advising Office, in the College of Engineering. To be considered for admission to the College, an applicant must be accepted by the University as a degree-seeking student and be academically in good standing.

Applicants whose native language is other than English must submit TOEFL scores to the College of Engineering. The minimum TOEFL score must be 550.

• College of Engineering Admission Requirements

1. Freshmen:
   a. Test Scores:
      - SAT—combined score of 1050 minimum with a minimum quantitative of 550.
      - ACT—combined score of 25 minimum and mathematics of 25 minimum.
   b. High School Mathematics: Should include sufficient algebra and trigonometry to enter Engineering Calculus I.
   c. High School Grade Point Average of 2.5/4.0.

2. Transfer Students:
   a. Engineering

Florida community college transfer students that have completed the courses shown below with a minimum grade of "C" are accepted directly into the College of Engineering.

Communications:
ENC 1101/1102 English I and II (6)

Mathematics:
MAC 2281
MAC 2282
MAC 2283
MAP 2302

Natural Sciences:
CHM 2045/2045L General Chemistry I (with lab) (4) or CHS 1440 Chemistry for Engineers
PHY 2048/2048L General Physics and Laboratory I (4)
PHY 2049/2049L General Physics and Laboratory II (4)

Continued
Humanities & Social Sciences:
- Humanities Courses (6)
- Social Science Courses (6)
- Humanities or Social Sciences (3)

b. Computer Science
Transfer students into the Computer Science program from a Florida community college are not required to have Differential Equations, MAPX302, or any of the Chemistry courses indicated above.

c. Information Systems
Transfer students into the Information Systems program from a Florida community college are not required to have Calculus III, Differential Equations, MAPX302, or any of the Chemistry courses indicated above.

All other transfer students should contact the College’s Admission Office (813/974-2684).

• Required Prerequisites for Entering Engineering programs

Once a student has been admitted to the College of Engineering, he/she must then seek admission into one of the specific departments.

The minimum requirements for acceptance by the departments administering the Engineering programs in Chemical, Civil, Electrical, Industrial and Mechanical Engineering are completion of English, Calculus, Differential Equations, Physics and Chemistry requirements.

The minimum requirements for admission to the Computer Engineering, Computer Science, and Information Systems programs offered by the Computer Science and Engineering Department are completion of English I & II, Physics I & II (and labs) and Calculus I & II with a grade point average of 3.0 or higher in those eight courses. Following departmental admission, it is necessary that a student complete the courses CDA 3100 (Computer Organization) and COP 3514 (Program Design) with a grade point average for all attempts of at least 3.0 prior to taking any other departmental courses.

Prior to being admitted to a department, a student may be permitted to take no more than two departmental engineering courses. Individual departments may have continuation requirements.

A student can have his or her academic records housed in a department and be advised by the department advisor prior to completing requirements for department admission if he or she so chooses. This type of student must still comply with all of the above-listed requirements prior to official acceptance by the department.

• Bachelor's Curriculum - Chemical Engineering

The schedule that follows indicates how a diligent student who can devote full time to coursework can satisfy requirements in four academic years. Students without a solid foundation or those who cannot devote full time to academics should plan a slower pace.

**Semester I**
- ENC 1101 Composition I 3
- MAC 2281 Eng. Calculus I 4
- CHM 2045 General Chemistry I 3
- EGN 3000 Found. of Engin. 1
- ALAMEA Perspectives Elective 3
- Fine Arts Elective 3
- Total 17

**Semester II**
- ENC 1102 Composition II 3
- MAC 2282 Eng. Calculus II 4
- CHM 2046 General Chemistry II 3
- CHM 2045L General Chem. I Lab 1
- PHY 2048 General Physics I 3
- PHY 2048L General Physics I Lab 1
- Historical Perspectives Elective 3
- Total 18

**Semester III**
- MAC 2283 Eng. Calculus III 4
- CHM 2046L General Chem. II Lab 1
- PHY 2049 General Physics II 3
- PHY 2049L General Phys. II Lab 1
- EGN 3311 Statics 3
- ECN 3211 Communications for Engineers 3
- Total 15

**Semester IV**
- MAP 2302 Differential Equations 3
- EGN 3358 Thermo, Fluids & HT 4
- EGN 3373 Circuits 3
- EGN 3443 Engineering Statistics 3
- EGN 3613 Engineering Economy 3
- Total 16

**Semester V**
- ECH 3023 Process Engineering I 4
- ECH 3323L Chem Lab I 1
- ECH 4264 Transport Phenomena 3
- CHM 2210 Org. Chem. I 3
- CHM 2210L Org. Chem. I Lab 2
- CHM 4410 Physical Chemistry I 3
- Total 16

**Semester VI**
- ECH 4265C Process Engineering II 4
- ECH 4265L Chem. Lab II 1
- CHM 2211 Org. Chem. II 3
- CHM 2211L Org. Chem. II Lab 2
- CHM 4412 Physical Chem. III 3
- Total 13

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