

Engineering

Associate in Engineering Science

Total Required Credits for Degree: minimum of 68

General Education Core Curriculum: 9 to 18

Communication: 6

Humanities and Fine Arts: 0 to 9

Social and Behavioral Sciences: 0 to 9

Essential Prerequisite Courses: 36 to 40

Engineering Specialty Courses: 8 to 23

Code: 8004

About the Program

The Engineering program at College of DuPage provides the first two years of baccalaureate work, including mathematics courses through calculus and differential equations, computer programming, chemistry, physics, engineering graphics, mechanics, circuits and general studies. Students in this program generally transfer to baccalaureate-granting institutions, where they study for a Bachelor of Science degree in Engineering that prepares them for professional registration.

Program web site:

www.cod.edu/academic/acadprog/tranprog/EnginrTr.htm

First Semester Possibilities

Students enrolled in a minimum of 12 credits are considered full-time students. The following courses are examples of possible choices for the first semester of study:

Course	Credits
Chemistry 1551.....	5
Engineering 1101.....	3
English 1101.....	3
Mathematics 2231.....	5

Program Notes

1. See an adviser for the appropriate choices for transfer to your chosen program.
2. Biology may be required for bioengineering majors. See an adviser for help in selecting the correct biology course.

Program Requirements

Each candidate for an Associate in Engineering Science degree shall satisfactorily complete a minimum of 68 credits, satisfy graduation requirements for all associate degrees, earn no credits graded satisfactory/fail, and earn no more than 42 credits by demonstrated competence. However, there is no guarantee that credits earned by demonstrated competence will transfer to a baccalaureate-granting school.

Use the *Student Planning Worksheet* or consult a list of General Education categories and courses for this degree to decide what needs to be taken. Links can be found on the Engineering online program guide at program web site noted above.

Under the specified headings below, the following courses are recommended:

General Education Core Courses: 14 to 29 credits

Communication: 6 credits

Required courses: English 1101, 1102

Humanities/Fine Arts: 0 to 9 credits

Select one to four transferable courses. Check with an engineering adviser.

Social/Behavioral Science: 0 to 9 credits

Select one to four transferable courses. Check with an engineering adviser.

Essential Prerequisite Courses: 36 to 40 credits

Mathematics: 18 credits

Required courses: Mathematics 2231, 2232, 2233, 2270

Chemistry: 5 credits

Required course: Chemistry 1551

Physics: 10 credits

Required courses: Physics 2111 and 2112

Optional: 0 or 5 credits

Recommended course: Physics 2115

Computer Science: 3 credits

Required course: CSCI 2480 or 2485

Engineering Specialty Courses: 8 to 23 credits

Engineering: Choose from Engineering 1101, 2201, 2202, 2203, 2205, 2210 and 2213.

Other Sciences: Choose from Biology 1151; Chemistry 1552, 2551, 2552

Notes

1. Select remaining elective courses from IAI General Education, Essential Prerequisite Courses and Engineering Specialty Courses to 68 credits.
2. Courses listed under Essential Prerequisite Courses and Engineering Specialty Courses, as well as the AES degree, will transfer from C.O.D. based on criteria set by each baccalaureate-granting institution. Check with an Engineering adviser both at College of DuPage and your transfer institution.
3. Students should complete entire course sequences in calculus and physics at the same school before transfer, since topics are covered in different orders by different schools.

(continued on next page)

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(continued from page 1)

IAI Majors

Engineering programs are highly structured to meet the Accreditation Board for Engineering and Technology (A.B.E.T.) standards required for registration as a professional engineer. Before transferring, you are strongly encouraged to complete an Associate in Engineering Science (A.E.S.) degree. To transfer as a junior, you must have 60 to 68 semester credits, including all of the prerequisite courses listed. You are unlikely to earn the bachelor's degree within two more years after transfer if you enter with less than 68 semester credits.

You should decide on an Engineering specialty and your preferred transfer school by the beginning of your sophomore year, since course requirements vary by specialty and by school. A grade of "C" or better is required in each course. Be sure to select your courses in consultation with an Engineering adviser. For the latest majors information, check the iTransfer web site: www.itransfer.org/.

Advisers

If you are considering this program as an area of study, consult with an adviser in this field:

	Location	Phone
Katie Nagle	BIC 1012B	(630) 942-2418
E-mail: naglek@cod.edu		