

# RAYEN SCHOOL OF ENGINEERING AND ENGINEERING TECHNOLOGY

## Accreditation

The baccalaureate degree programs in the Rayen School of Engineering and Engineering Technology accredited by the Engineering Technology Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET) are:

- chemical engineering (jointly accredited by the American Institute of Chemical Engineers)
- civil engineering
- electrical engineering
- industrial and systems engineering
- mechanical engineering

Those programs accredited by the Engineering Technology Accreditation Commission of ABET are:

- civil and construction engineering technology
- electrical engineering technology
- mechanical engineering technology

## Associate of Applied Science Degree

Associate of Applied Science majors include:

- civil and construction engineering technology
- computer information systems and information technology
- electrical engineering technology
- mechanical engineering technology

These majors offer a 2+2 degree program design leading to the Bachelor of Science in Applied Science degree. Consult the department sections of the Undergraduate Catalog for specific course information.

## School of Engineering Disqualification

A student who earns two grades of D, F, or NC in the same course(s) listed below will be disqualified from transferring into a degree-granting engineering major. These courses are:

COURSE	TITLE	S.H.
MATH 1513	Algebra and Transcendental Function	5
MATH 1571	Calculus 1	4
ENGL 1540	Introduction to College Writing	3
ENGL 1550	Writing 1	3
CHEM 1515 & 1515L	General Chemistry 1 and General Chemistry 1 Laboratory	4
PHYS 2610	General Physics 1	4

## Enrollment in Restricted Engineering Courses

Enrollment in most engineering and engineering technology courses is restricted to those admitted to a degree-granting engineering major. A few engineering courses are not restricted. They are:

COURSE	TITLE	S.H.
ENGR 1500	Engineering Orientation	1

ENGR 1550	Engineering Concepts	2
ENGR 1560	Engineering Computing	2
CEEN 2610 & 2610L	Surveying and Surveying Laboratory	4
ECEN 1521 & 1521L	Digital Circuits and Digital Circuits Laboratory	4
MECH 1560	Engineering Communication with CAD	2

All other courses require admission to a professional engineering major unless approved by the chair of the engineering department and coordinator of the engineering program offering the course and by the STEM College dean. Students will be administratively withdrawn from restricted courses in which they are improperly enrolled.

## Bachelor of Engineering Degree (BE) Graduation Policies

All engineering programs have pre-college course requirements listed in the chart at the end of this section that should be completed in high school or in equivalent course work at the college level. YSU offers the equivalent high school courses for those not meeting these pre-college requirements. These high school deficiencies do not count toward graduation requirements and should be completed during the first two years of enrollment.

Each engineering program has minimum graduation requirements. These requirements can affect a student's enrollment in senior-level classes. If a senior-level student reaches a point where it is not possible to achieve graduation requirements, further enrollment in engineering classes will be denied. In addition to the overall recalculated C average required by the University, an unrecalculated C average in the major is required. Also, an unrecalculated C average in all engineering courses is required in all majors. **These minimum graduation requirements are referred to as a triple C requirement.**

## Chemical Engineering

A student who is failing to meet the triple C requirement prior to the senior year will be denied enrollment in CHEN 4887 Process and Plant Design 1.

## Civil and Environmental Engineering

A student who is failing to meet the triple C requirement prior to the senior year will be denied enrollment in:

COURSE	TITLE	S.H.
CEEN 4863	Integrated Design Project	3
CEEN 5837	Environmental Engineering Design	3
CEEN 5855	Reinforced Concrete Design	3
CEEN 4881	Geotechnical Engineering	3

## Electrical and Computer Engineering

Students who have not earned a C or better grade in ECEN 3741 Electromagnetic Fields 1 and ECEN 3742 Electromagnetic Fields 2 and students who are failing to meet the triple C requirement will be denied enrollment in senior level courses.

## Industrial and Systems Engineering

A student who is failing to meet the triple C requirement will be denied enrollment in 4000- and 5000-level ISEN courses.

## Mechanical Engineering

A student who is failing to meet the triple C requirement will be denied permission to register in any junior level mechanical engineering course until remedial measures, as required by the department chair, are agreed to by the student. Also, at the end of the junior year, the student will be denied

permission to register in MECH 4808 Mechanical Systems Design 1, MECH 4808L Mechanical Systems Design Laboratory, and MECH 4809 Mechanical Systems Design 2, until the triple C requirement is met .

## Cooperative Education/Professional Practice

Several programs leading to a baccalaureate degree offer students an optional cooperative education program. Co-op students are required to complete the same academic program for graduation as those not participating in the cooperative education experience. Credit hours awarded for the cooperative education experience are considered "add-on" hours to the degree. Professional practice opportunities include working with faculty on grants and research projects as well as internship opportunities with local industry. A professional practice coordinator is available to assist in student placement.

The table below shows the minimum pre-college requirements:

COURSE	TITLE	S.H.
English		3
Algebra 1 and 2		2
Geometry		1
Trigonometry		.5
Chemistry		1
Physics		1
Other		6.5

For more information, visit the **Rayen School of Engineering**.