



PRE-ENGINEERING

Associate of Science

About the Program

The Pre-Engineering program is designed to prepare graduates for transfer to a four-year institution in any chosen engineering discipline. Our focus will be to cultivate the student's ability to make innovative application of mathematics, science and engineering principles. Fundamental knowledge, teamwork, creativity of design, and ethics will be cornerstones of the program. Students in Pre-Engineering at Calhoun will have access to government agencies and local industries to examine the potential for future employment.

How Do I Apply?

Everyone must submit an application for admission to either the Admissions Office on the Decatur campus or to the Huntsville campus. At that time, you'll receive further information on admissions requirements.

How Much Will it Cost?

Tuition at Calhoun — the fees paid to take classes— is among the lowest in the area. A full-time student will pay between \$1140-\$1520 per 15-week semester. A single class will cost only \$285. Since the college does not have dormitories, the only other costs will be for transportation to and from class and books and supplies. And, if you need help with college costs, the Office of Student Financial Services has information on grants, work study, scholarships, and loans.

Future Academic Opportunities

Our graduates may choose to pursue a baccalaureate degree in one or more of the following engineering disciplines:

- | | |
|---------------------------|--------------------------|
| Aerospace | Industrial |
| Agricultural | Manufacturing |
| Architectural | Mechanical |
| Bioengineering/Biomedical | Metallurgy and Materials |
| Chemical | Mineral and Mining |
| Civil | Nuclear |
| Computer/Software | Ocean |
| Electrical | Systems |
| Engineering Technology | Transportation |
| Environmental | |

Curriculum

PRE-ENGINEERING

Associate of Science Degree

GENERAL EDUCATION CORE REQUIREMENTS

ORI 101 Orientation to College	1
ENG 101 English Composition I	3
ENG 102 English Composition II	3
Literature Elective (Choose from ENG 251, ENG 252, ENG 261, ENG 262).....	3
Fine Arts Elective (Choose from ART 100, ART 203, ART 204, MUS 101, THR 120)	3
SPH 107 Fundamentals of Public Speaking.....	3
MTH 125 Calculus I	4
PHY 213 General Physics with Calculus I.....	4
PHY 216 Recitation in Physics with Calculus I.....	1
PHY 214 General Physics with Calculus II.....	4
PHY 217 Recitation In Physics with Calculus II.....	1
HIS Sequence (Choose from HIS 121/122 or HIS 201/202)	6
Social/Behavioral Science Elective	3
Total	39

MAJOR COURSE REQUIREMENTS

CHM 111 College Chemistry I.....	4
MTH 126 Calculus II	4
MTH 227 Calculus III	4
MTH 238 Applied Differential Equations I.....	3
Total	15

In addition, students must select 8-10 semester hours from the following courses based on the four-year requirements for the chosen engineering discipline (i.e., aerospace, civil, chemical, computer, electrical, industrial, materials, mechanical, etc.) Refer to the STARS Transfer Guide and the senior institution for transferability.

CHM 112 College Chemistry II	4
CHM 221 Organic Chemistry I.....	4
CHM 222 Organic Chemistry II.....	4
CIS 251 C++ Programming.....	3
MTH 237 Linear Algebra.....	3
MTH 270 Probability and Statistics Concepts.....	3
PHY 218 Modern Physics.....	4
EGR 100 Engineering Orientation	1
EGR 101 Engineering Foundations	3
EGR 125 Modern Graphics for Engineers.....	3
EGR 157 Computer Methods for Engineers using MATLAB	3
EGR 220 Engineering Mechanics - Statics.....	3
Total.....	8-10
TOTAL CREDITS	62-64

For program information, please contact Karen Bright at
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Calhoun Community College

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