

Pre-Engineering (Associate of Science)

The Associate of Science in Pre-Engineering Degree Program allows students to either receive an AS degree in Pre-Engineering or to transfer to the engineering programs of regional four-year colleges and universities.

To receive this degree, the student must;

- Earn a “C” or better in all courses.
- Earn 12 of the final 15 credits at BRCC.
- Complete the coursework listed below.

Program Outcomes. Upon successful completion of the program, the graduate will be able to:

1. Employ principles of mathematics and applied science toward engineering problems;
2. Design and conduct laboratory experiments that include data collection and analysis;
3. Work effectively as a team member;
4. Identify, formulate and solve basic engineering problems;
5. Practice professional and ethical responsibility; and
6. Identify the roles of engineers in society.

PROGRAM OF STUDY

First Semester	Credit Hours
MATH 2115 Calculus I	5
ENGL 1013 English Composition I	3
CHEM 1123 Chemistry I for Science Majors	3
Approved Natural Science Lab	1
Approved Gen. Ed. Social Science Elective	3
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	15
Second Semester	Credit Hours
MATH 2125 Calculus II	5
PHYS 2133 Engineering Physics I	3
ENGL 1023 English Composition II	3
Approved Natural Science	3
Approved Natural Science Lab	1
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	15
Third Semester	Credit Hours
PHYS 2153 Engineering Physics III	3
ENGR 1032 Engineering Graphics	2
ENGR 2953 Comprehensive Electrical Engineering	3
Approved Gen Ed. Humanities Elective	3
General Education Arts Elective	3
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	15
Fourth Semester	Credit Hours
Approved Gen. Ed. Social Science Elective	3

Approved Elective	3
ENGR 2453 Statics	3
Approved Gen. Ed. Humanities Elective	3
Approved Gen. Ed. Humanities Elective	3
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	15
Total Degree Hours	60

BRCC currently has an articulation agreement for the Pre-Engineering AS degree with the following institutions: Louisiana State University (LSU), Southern University (SUBR), University of Louisiana at Lafayette (ULL), and Louisiana Tech University (LA Tech).

LSU Concentrations include 8 concentrations: Biological, Civil, Chemical, Electrical & Computer, Environmental, Industrial, Mechanical, and Petroleum Engineering

SUBR Concentrations include 3 concentrations: Civil, Electrical and Mechanical Engineering

ULL Concentrations include 5 concentrations: Civil, Chemical, Electrical & Computer, Mechanical, and Petroleum Engineering

LA Tech Concentrations include 7 concentrations: Biomedical, Civil, Chemical, Electrical, Industrial, Mechanical, and Nanosystems Engineering

It is the responsibility of each student transferring to a four-year institution to seek advising from the STEM division because required courses vary by institution. There are additional transferrable courses that may be taken based on the transfer institution.

For more information, contact the Division of Science, Technology, Engineering, and Mathematics at (225) 216-8226.