



FORT PECK
COMMUNITY COLLEGE

ASSOCIATE OF SCIENCE (AS) DEGREE PRE-ENGINEERING

The Associate of Science Degree (AS) in Pre-Engineering is designed to prepare students to transfer to a four-year institution to complete their Bachelor of Science (B.S.) degree in engineering. Students can complete the first two years of the engineering degree program at Fort Peck Community College (FPCC). The Pre-Engineering program provides students with a strong foundation in mathematics, physics, chemistry, and introductory engineering courses that enable them to successfully complete their engineering degree. Students can transfer to any university of their choice, but the pre-engineering program is designed as a transfer program* between FPCC and Montana State University-Bozeman.



ASSOCIATE OF SCIENCE - PRE-ENGINEERING

General Education Requirements

Core I Communications - 9 credits

WRIT 101, WRIT 201, and COMX 111

Core II Mathematics and Science - 12 credits

M 171 Calculus I 4 credits

CHMY 141/142 College Chemistry I/Lab 4 credits

PHSX 220 Physics I 4 credits

Core III Arts & Humanities - 6 credits

(3 Arts & 3 Humanities)

Core IV Social Sciences - 3 credits

Core V Native American Studies - 3 credits

Program of Study Courses - 19 credits

M 172 Calculus II 4 credits

M 273 Multivariable Calculus 4 credits

M 274 Intro. to Differential Equations 4 credits

PHSX 222 Physics II 4 credits

EGEN 101 Intro. to Engineering Calculations
& Problem Solving 3 credits

Additional Required Courses** (9-12 crd)

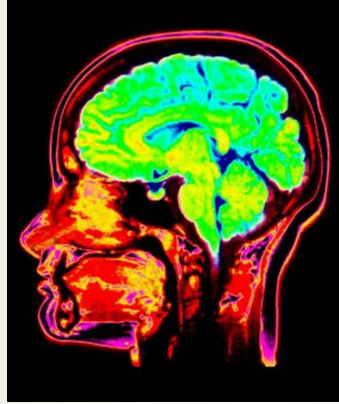
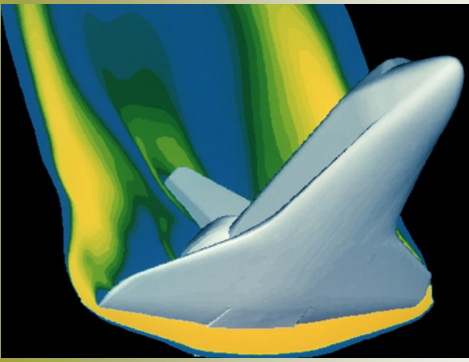
(From the table below)

Total credits required for degree 61-64 crd

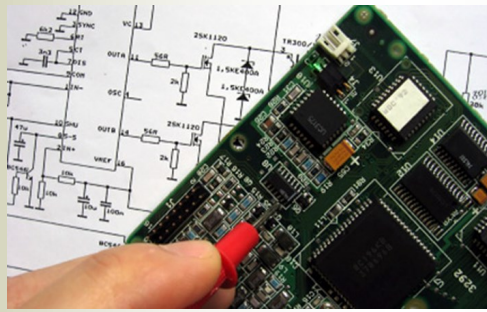
**Additional Required/Elective Courses Based on the Engineering Degree Option

CHMY 143/144 - College Chemistry II /Lab (4 Cr)	Required for Chemical Engineering, Civil Engineering, and Bioengineering Elective for Electrical Engineering
EELE 201 - Circuits I for Engineering (4 Cr)	Required for Electrical, Computer, Mechanical, & Civil Engineering degrees Elective for Chemical Engineering and Bioengineering
CSCI 112 - Programming with C (3 Cr)	Required for Electrical Engineering, Computer Engineering, and Industrial & Management Systems Engineering (IMSE)
EGEN 201- Engineering Mechanics-Statics (3 Cr)	Required for Mechanical Engineering, Civil Engineering, and IMSE Elective for Electrical, Chemical, and Bioengineering degrees
EGEN 202 -Engineering Mechanics-Dynamics (3 Cr)	Required for Mechanical Engineering, Civil Engineering, and IMSE
BIOB 160/161-Princip. of Living Systems/Lab (4 Cr)	Required for Civil Engineering
BIOM 250/251-Micobiology for Health Sci/Lab (4 Cr)	Required for Bioengineering

*FPCC has 2+2 Articulation Agreements with MSU in Civil, Electrical, and Computer Engineering. To satisfy the 2+2 Articulation Agreements, students must attend the sophomore year summer semester at MSU. Students majoring in Chemical, Mechanical, Bioengineering, or Industrial & Management Systems Engineering will need to spend more than two years at MSU to finish their engineering degree program. The Articulation Agreements are available at the FPCC Pre-Engineering Department. Transfer plans for the Chemical, Mechanical, Bioengineering, and Industrial & Management Systems Engineering are also available at the Pre-Engineering Department.



- Students in the FPCC Pre-Engineering program should work closely with their advisor to select courses that fit into their engineering degree program at the transfer institution.
- For full course descriptions, please refer to the FPCC Course Catalog at: WWW.FPCC.EDU



Program Learning Outcomes

- Apply knowledge of mathematics, physics, chemistry, and engineering.
- Design and conduct experiments as well as analyze and interpret data.
- Identify, formulate, analyze, and solve basic engineering problems.

FPCC STEM FACULTY

Dr. A. Wehbe - PhD in Electrical Engineering
 Dr. C. Lamsal - PhD in Physics
 Dr. S. Coon - PhD in Physiology
 Richard Denny- MS in History/Math
 Karli McGowan - MS in Math Education

Contact Information

Dr. Wehbe awehbe@fpcc.edu
 or Dr. Lamsal clamsal@fpcc.edu
 FPCC - Pre-Engineering/Math Department
 or call FPCC at 768-6300

Program Benefits

- Finish the first two years of your engineering degree program at home. This will save you about \$32000 compared to starting at MSU.
- Free tuition for freshmen who graduated from high school
- Stipends of \$700/semester each are available for students in the Pre-Engineering program who are enrolled full-time and in good academic standing
- Student employment available for qualified students:
 - ◆ STEM tutoring: 10-20 hours per week at \$12/hr
 - ◆ Summer Undergraduate Research: 6-7 weeks at 30 hours per week at \$12/hr
- Small class sizes
- Qualified faculty
- Student-centered faculty



Fort Peck Community College

PO Box 398
 605 Indian Ave
 Poplar, MT 59255
 Phone: 406-768-6300
 Fax: 406-768-6301
www.fpcc.edu