

Certificate – Pre-Engineering

PHILOSOPHY:

In order to meet the evolving field of engineering and construction, Stone Child College offers a one-year certification program in pre-engineering assistantship. The college believes that engineers of the future will continue to rely on fundamental engineering science and contemporary computational tools to guide their choices. This program of study emphasizes rigor in engineering science, design, and application. The program will prepare students for professional practice in the engineering industry.

EXPECTED LEARNER OUTCOMES:

Students will:

1. Use computer aided drafting software.
2. Perform survey work including
 - a. layout
 - b. topographical leveling
 - c. differential leveling
 - d. transfer of elevations from one benchmark location to another
3. Solve problems which require trigonometry and calculus for solution
4. Apply fundamental physics laws and concepts.

COURSE REQUIREMENTS:

GENERAL EDUCATION	
CAPP 120: Intro to Computers (3 credits)	15 CREDITS
WRIT 101: College Writing I (3 credits)	
WRIT 201: College Writing II (3 credits)	
M 121: College Algebra (3 credits)	
NASX 100: Cree Language I (3 credits)	
PROFESSIONAL CORE	
CHMY 141: General Chemistry I (3 credits)	16 CREDITS
CHMY 142: General Chemistry I Lab (1 credit)	
CSCI 150: Intro to AutoCAD (3 credits)	
ENGI 120: Surveying I (3 credits)	
M 151: Pre-calculus (3 credits)	
M 171: Calculus I (3 credits)	
TOTAL CREDIT REQUIREMENTS	31 CREDITS