CIDSE INDUSTRIAL ENGINEERING
GRADUATE ADMISSIONS DEFICIENCY COURSES

Deficiency coursework completed with a grade of "C" or better at the undergraduate level will satisfy the requirements.
Lower division courses may be taken at local community colleges.
Please visit www.aztransfer.com for courses equivalencies.

CSE 110 PRINCIPLES OF PROGRAMMING WITH JAVA (3)

Concepts of problem solving using Java, algorithm design, structured programming, fundamental algorithms and techniques, and computer systems concepts. Social and ethical responsibility. Lecture, lab.
Prerequisite: None

CSE 205 OBJECT-ORIENTED PROGRAM AND DATA STRUCTURES (3)

Problem solving by programming with an object-oriented programming language. Introduction to data structures. Overview of computer science topics.
Prerequisite: CSE 110.

MAT 242 ELEMENTARY LINEAR ALGEBRA (2)

Introduces matrices, systems of linear equations, determinants, vector spaces, linear transformations, and eigenvalues. Emphasizes development of computational skills.
Prerequisites: MAT 210, MAT 251, MAT 265 or MAT 270.

IEE 376 OPERATIONS RESEARCH DETERMINISTIC TECHNIQUES/APPLICATIONS (3)

Industrial systems applications with deterministic operations research techniques. Resource allocation, product mix, production, transportation, task assignment, networks.
Prerequisites: MAT 242 or MAT 342 or MAT 343; and CSE 205

IEE 380 PROBABILITY AND STATISTICS FOR ENGINEERING PROBLEM SOLVING (3)

Applications-oriented course with computer-based experience using statistical software for formulating and solving engineering problems.
Prerequisite: MAT 266 or MAT 271.

IEE 470 STOCHASTIC OPERATIONS RESEARCH (3)

Modeling and analysis with emphasis on stochastic operations research. Models for stochastic processes, including Markov chains, queueing and decision analysis.
Prerequisite: IEE 376 and IEE 380.