

ARCHITECTURAL ENGINEERING (ARE)

ARE 301, ARE JUNIOR SEMINAR, 1 Credit

Professional practices of architectural engineering.

ARE 352, DESIGN OF ELECTRICAL AND ILLUMINATION SYSTEMS FOR BUILDINGS, 0-4 Credits

Design of electrical and illumination systems in buildings, including consideration of energy usage.

Prerequisite: CEM 471 with C or better

ARE 353, DESIGN OF HVAC SYSTEMS FOR BUILDINGS, 4 Credits

Design and engineering of heating, ventilating, and air conditioning (HVAC) systems in buildings, including consideration of energy usage and indoor environmental conditions.

Prerequisite: CEM 472 with C or better

ARE 405, READING AND CONFERENCE, 1-16 Credits

This course is repeatable for 16 credits.

ARE 406, PROJECTS, 1-16 Credits

This course is repeatable for 16 credits.

ARE 418, ^ARCHITECTURAL ENGINEERING PROFESSIONAL PRACTICE, 4 Credits

Principles and methods of solving architectural engineering problems in a studio setting, with considerations of space, form, function, and technology. Lec/rec. (Writing Intensive Course)

Attributes: CWIC – Core, Skills, WIC

Prerequisite: ARE 351 with C or better and ARE 352 [C] and CE 382 [C]

ARE 419, ^ARCHITECTURAL ENGINEERING DESIGN, 3 Credits

A capstone design project experience exposing students to problems and issues similar to those encountered in the practice of architectural engineering. Use of Building Information Modeling (BIM) in design, construction management, and integration of architectural, structural, mechanical, electrical and lighting systems. Lec/rec. (Writing Intensive Course)

Attributes: CWIC – Core, Skills, WIC

Prerequisite: ARE 418 with C or better

ARE 451, ADVANCED BUILDING CONSTRUCTION METHODS, 4 Credits

Advanced building construction methods, including integration of building components in building envelopes. Lec/rec.

Prerequisite: CEM 442 with C or better

ARE 499, SPECIAL TOPICS, 1-16 Credits

This course is repeatable for 16 credits.

ARE 501, RESEARCH, 1-16 Credits

This course is repeatable for 16 credits.

ARE 503, THESIS, 1-16 Credits

This course is repeatable for 999 credits.

ARE 505, READING AND CONFERENCE, 1-16 Credits

This course is repeatable for 16 credits.

ARE 506, PROJECTS, 1-16 Credits

This course is repeatable for 16 credits.

ARE 599, SPECIAL TOPICS, 0-16 Credits

This course is repeatable for 16 credits.

ARE 601, RESEARCH, 1-16 Credits

This course is repeatable for 16 credits.

ARE 603, THESIS, 1-16 Credits

This course is repeatable for 999 credits.

ARE 605, READING AND CONFERENCE, 1-16 Credits

This course is repeatable for 16 credits.

ARE 699, SPECIAL TOPICS, 1-16 Credits

This course is repeatable for 16 credits.