<u>ARCH 3212: Architecture Structures III: Concrete and Lateral Loads</u>

3 Credit Hours

Prerequisite: ARCH 3211

This course builds on ARCH 3211 with a focus on design and analyses of statically determinate and indeterminate concrete structure systems, mainly frames. Upon completion students would be able to apply design techniques in defining a frame system and selecting or sizing concrete members, particularly beams and columns, walls, foundations, and slabs. Knowledge and skills are applied in a final team project that highlights a structural form employing concrete.

<u>ARCH 3313: Environmental Technology II: Human Comfort and Building</u> <u>Systems</u>

3 Credit Hours

Prerequisite: ARCH 2311

This course offers lecture instruction that is focused on the fundamental connection between human comfort and active / passive design mechanisms. Topics include building context / orientation and form, envelope characteristics and materials, and human comfort within interior environments. Additionally, energy conservation and major mechanical systems are examined in relation to building typology and sustainability.

ARCH 3314: Environmental Technology III: Lighting, Electrical and Acoustics 3 Credit Hours

Prerequisite: ARCH 3313

This course is the culmination of the environmental technology sequence. Lectures elaborate upon prior coursework and place focus upon natural and artificial lighting, electrical systems, and building acoustical design. Students will continue to explore the connection between building form and environmental design strategies to develop and enhance interior atmospheres.

ARCH 3398: Internship

Variable 1-12 Credit Hours

Prerequisite: Department Approval

This course is an internship course designed to provide real world experience options supported by the department.