

## *Architecture (ARC)*

### **ARC 100 Architecture Orientation**

2 Hours

Prerequisites: None  
2 hours weekly (2-0)

This course will examine the architectural profession and the various types of jobs and responsibilities found in an architectural firm. The student will study the types of construction jobs and tasks associated with modern construction.

### **ARC 140 Architecture Practice and Standards**

2 Hours

Prerequisites: None  
2 hours weekly (2-0)

This course introduces the student to drafting practice and standards used in architectural firms. Individuals will learn document standards, document control, office procedures, and revisions to existing drawings.

### **ARC 183 Site and Building Assessment**

2 Hours

Prerequisites: DRT 185 Computer Graphics I  
4 hours weekly (0-4)

This course is designed to give the student experience in creating detail drawings of existing buildings. The student will measure, document, and develop various drawings in an effort to improve an existing building or structure.

### **ARC 184 Architecture Documents I**

4 Hours

Prerequisites: DRT 185 Computer Graphics I  
6 hours weekly (2-4)

This course introduces the student to architectural drafting techniques. The student will learn how to develop plans for a residential building. Following are the key topics covered in class: site plan, floor plan, foundation plan, wall sections, elevations, electrical, and plumbing.

### **ARC 187 Architecture Design**

3 Hours

Prerequisites: None  
3 hours weekly (3-0)

An introduction to the fundamentals of architectural design such as object perception and light. Also covered are figure-ground composition, balance and movement, proportion and rhythm, mass-space organization, multiple viewing positions, one and two point perspective, orthographic projection and freehand drawings.

### **ARC 201 Strength of Materials**

3 Hours

Prerequisites: None  
3 hours weekly (3-0)

A study of forces, components, resultants and equilibrants, stress and strain in compression, tension and shear, modulus of elasticity, controls, moments of inertia and section modulus of sections, shearing stress and diagrams, bending moments, and diagrams in beams.

### **ARC 202 Presentation Drawings**

3 Hours

Prerequisites: ARC 184 Architecture Documents I or GRD 110 Graphics Design I  
4 hours weekly (2-2)

Study of design principles of presentation drawings related to the architectural field. The different types of presentation methods including elevations, floor plans, site plans, and sections will be discussed. The various types of common media will be explored. The three different types of perspective drawings will be discussed and evaluated as each relates to presentation drawings. Line types, color, and methods of shading will be used on projects.

### **ARC 281 Architecture Applications 3D**

3 Hours

Prerequisites: DRT 185 Computer Graphics I  
4 hours weekly (2-2)

This course is designed to introduce the student to 3D application in architecture. The student will use 3D solids modeling to generate various architecture plans such as: floor, foundation, elevations, and 3D renderings.

**ARC 286 Architecture Project**

4 Hours

Prerequisites: ARC 294

6 hours weekly (2-4)

Students execute a comprehensive design project with required documentation. Students demonstrate the full array of their knowledge, skill, ingenuity, perseverance, adaptability, and productivity as a manifestation of their preparedness for responsible employment.

**ARC 294 Architecture Documents II**

4 Hours

Prerequisites: ARC 184

6 hours weekly (2-4)

This course emphasizes toward commercial structures of masonry, concrete, and steel. The student will complete a floor plan, foundation plan, elevations, and various detail drawings. All drawings are completed using proper codes, product data, and standards.