

Implementation Date
Fall 2008

PROGRAM CONCENTRATION:

**Architecture, Construction,
Communications & Transportation**

CAREER PATHWAY:

Engineering Drawing & Design

COURSE TITLE:

Architectural Drawing and Design II

Architectural Drawing and Design II is a one-credit course that builds on the skills developed in Architectural Drawing and Design I. Emphasis is placed on schedules, plumbing, heating and air, graphic presentations, plot/site plans, specifications, and building estimations. While the term computer-aided design (CAD) does not appear in each competency, CAD tools and software should be used extensively throughout the course. The standards are aligned with the drafting and design standards in Georgia's technical colleges, thus helping students qualify for advanced placement should they continue their education at the postsecondary level. Further, the standards are aligned with the national standards of the American Design Drafting Association (ADDA). Students who successfully complete this and other drafting courses should be prepared to take the Drafter Certification Examination from the ADDA. Competencies for the co-curricular student organization, SkillsUSA, are integral components of both the core employability skills standards and the technical skills standards. SkillsUSA activities should be incorporated throughout instructional strategies developed for the course.

ELECTRICAL

ACT-ADDII-1. Students will prepare electrical plans.

- a. Understand general codes related to electrical plans.
- b. Apply correct electrical symbols.

ACADEMIC STANDARDS:

SCSh9. Students will enhance reading in all curriculum areas.

MM1P4. Students will make connections among mathematical ideas and to other disciplines.

ELA9RL5. The student understands and acquires new vocabulary and uses it correctly in reading and writing.

ELA11LSV1. The student participates in student-to-teacher, student-to-student, and group verbal interactions.

ADDA: Advanced CADD skills

SECTIONS AND DETAILS

ACT-ADDII-2. Students will prepare sections and details.

- a. Explain the purpose of sections and details.

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- b. Draw a wall section.
- c. Draw a fireplace detail.
- d. Draw a cabinet section.

ACADEMIC STANDARDS:

MM1P4. Students will make connections among mathematical ideas and to other disciplines.

ELA9RL5. The student understands and acquires new vocabulary and uses it correctly in reading and writing.

SCSh4. Students will use tools and instruments for observing, measuring, and manipulating scientific equipment and materials.

ADDA: Advanced CADD skills

SITE PLANS

ACT-ADDII-3. Students will prepare site plans.

- a. Understand general codes related to site planning.
- b. Draw a site plan for a building with a given plot of land using correct symbols.

ACADEMIC STANDARDS:

SCSh4. Students will use tools and instruments for observing, measuring, and manipulating scientific equipment and materials.

MM1P4. Students will make connections among mathematical ideas and to other disciplines.

ELA9RL5. The student understands and acquires new vocabulary and uses it correctly in reading and writing.

ADDA: Advanced CADD skills

PRESENTATIONS

ACT-ADDII-4. Students will create a presentation for a building.

- a. Demonstrate the purpose of architectural presentations.
- b. Draw one-point and two-point perspectives.
- c. Create a presentation using various methods.

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ACADEMIC STANDARDS:

MMIP4. Students will make connections among mathematical ideas and to other disciplines.

ELA9RL5 The student understands and acquires new vocabulary and uses it correctly in reading and writing.

SCSh4. Students will use tools and instruments for observing, measuring, and manipulating scientific equipment and materials.

ADDA: Advanced CADD skills

CTAE Foundation Skills

The Foundation Skills for Career, Technical and Agricultural Education (CTAE) are critical competencies that students pursuing any career pathway should exhibit to be successful. As core standards for all career pathways in all program concentrations, these skills link career, technical and agricultural education to the state's academic performance standards.

The CTAE Foundation Skills are aligned to the foundation of the U. S. Department of Education's 16 Career Clusters. Endorsed by the National Career Technical Education Foundation (NCTEF) and the National Association of State Directors of Career Technical Education Consortium (NASDCTEc), the foundation skills were developed from an analysis of all pathways in the sixteen occupational areas. These standards were identified and validated by a national advisory group of employers, secondary and postsecondary educators, labor associations, and other stakeholders. The Knowledge and Skills provide learners a broad foundation for managing lifelong learning and career transitions in a rapidly changing economy.

CTAE-FS-1 Technical Skills: Learners achieve technical content skills necessary to pursue the full range of careers for all pathways in the program concentration.

CTAE-FS-2 Academic Foundations: Learners achieve state academic standards at or above grade level.

CTAE-FS-3 Communications: Learners use various communication skills in expressing and interpreting information.

CTAE-FS-4 Problem Solving and Critical Thinking: Learners define and solve problems, and use problem-solving and improvement methods and tools.

CTAE-FS-5 Information Technology Applications: Learners use multiple information technology devices to access,

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organize, process, transmit, and communicate information.

CTAE-FS-6 Systems: Learners understand a variety of organizational structures and functions.

CTAE-FS-7 Safety, Health and Environment: Learners employ safety, health and environmental management systems in corporations and comprehend their importance to organizational performance and regulatory compliance.

CTAE-FS-8 Leadership and Teamwork: Learners apply leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives.

CTAE-FS-9 Ethics and Legal Responsibilities: Learners commit to work ethics, behavior, and legal responsibilities in the workplace.

CTAE-FS-10 Career Development: Learners plan and manage academic-career plans and employment relations.

CTAE-FS-11 Entrepreneurship: Learners demonstrate understanding of concepts, processes, and behaviors associated with successful entrepreneurial performance.