# Research & Design in Building Trades Course No. 17005 Credit: 1.0

|  |  |  |  |
| --- | --- | --- | --- |
| **Student name:**  |  | **Graduation Date:** |  |

Pathways and CIP Codes:Construction & Design (46.0000) - Construction Strand

Course Description: An advanced research and **application level** course covering specific topics in building construction to include management and “green building” skills. (Prerequisites: 17002/Carpentry I or 38002/Carpentry II.)

Directions:The following competencies are required for full approval of this course. Check the appropriate number to indicate the level of competency reached for learner evaluation.

**RATING SCALE:**

4. Exemplary Achievement: Student possesses outstanding knowledge, skills or professional attitude.

3. Proficient Achievement:Student demonstrates good knowledge, skills or professional attitude. Requires limited supervision.

2. Limited Achievement:Student demonstrates fragmented knowledge, skills or professional attitude. Requires close supervision.

1. Inadequate Achievement:Student lacks knowledge, skills or professional attitude.

0. No Instruction/Training:Student has not received instruction or training in this area.

## Benchmark 0: The following competencies are to be taught within ALL application level courses offered in your school's approved pathway.

### Competencies

| **#** | **DESCRIPTION** | **RATING** |
| --- | --- | --- |
| 1.1 | Demonstrate an understanding of industry standards for personal safety including the safe use of tools, equipment, and hazardous materials. |  |
| 1.2 | Demonstrate time management skills. |  |
| 1.3 | Create and utilize employment documents including a resume and portfolio. |  |
| 1.4 | Demonstrate job seeking and interview skills. |  |
| 1.5 | Understand and respond to performance reviews. |  |

## Benchmark 1: Click or tap here to enter text.

### Competencies

| **#** | **DESCRIPTION** | **RATING** |
| --- | --- | --- |
| 1.1 | Draw set of house plans. |  |
| 1.2 | Research building permits and codes. |  |
| 1.3 | Research footings and foundations. |  |
| 1.4 | Research post and beam construction. |  |
| 1.5 | Research system-built housing. |  |
| 1.6 | Research careers in building trades. |  |
| 1.7 | Research applications of “green building". |  |
| 1.8 | Demonstrate knowledge of advanced roof systems, including seam metal roofs. |  |
| 1.9 | Demonstrate knowledge of advanced floor systems and floor coverings. |  |
| 1.10 | Demonstrate knowledge of advanced wall systems including firewalls and sound control walls. |  |
| 1.11 | Demonstrate knowledge of advanced stair systems including stairs for commercial construction. |  |
| 1.12 | Research Modern & Future trends in equipment, methods & techniques |  |
| 1.13 | Research Modern & Future trends in material management |  |
| 1.14 | Utilize effective management techniques to organize work flow. |  |

I certify that the student has received training in the areas indicated.

Instructor Signature:

For more information, contact:

CTE Pathways Help Desk

(785) 296-4908

pathwayshelpdesk@ksde.org



900 S.W. Jackson Street, Suite 102

Topeka, Kansas 66612-1212

[https://www.ksde.org](https://www.ksde.org/)

The Kansas State Department of Education does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs and activities and provides equal access to any group officially affiliated with the Boy Scouts of America and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: KSDE General Counsel, Office of General Counsel, KSDE, Landon State Office Building, 900 S.W. Jackson, Suite 102, Topeka, KS 66612, (785) 296-3201.