# Exploring Skilled and Technical Science – 6th Grade

## Course Description

## In this course students will explore fundamentals in Skilled and Technical Sciences at the 6th grade level.

## Course Code: 100706

| Course Content | CTE Reference Standards | Crosswalk to Nebraska Academic Crosswalk |
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| **Standard 1. Students will understand and accurately apply measurement.**  |  |  |
| Benchmark 1.1 Demonstrate linear measurement Sample performance indicators:* Read a ruler
 | KS - MNC10.01.01KS – ESS01.03.01KS – ESS01.03.02KS – ESS01.03.04STL12.1STL13.F | MA6.2.5 (1)SC8.1.1.j (1) |
| **Standard 2. Students will know and model safe lab procedures and techniques.**  |  |  |
| Benchmark 2.1 The student will know safety requirements. Sample performance indicators:* Follow lab procedures
* Demonstrate proper storage and handling of materials
* Demonstrate safe tool operation
* Demonstrate proper use of safe personal protection equipment
 | KS - MNC06.05.03KS – ACC06.01.03KS – ESS06KS – SCC06KS – SCPA10.02.04STL12.H-K |  |
| **Standard 3. Students will be introduced to Design and Problem Solving.** |  |  |
| Benchmark 3.1 Design/Problem SolvingSample performance indicators:* Identify the problem
* Brainstorm for ideas
* Select best solution
* Complete model/prototype
* Test and evaluate model/prototype
* Redesign and improve
 | KS - MNC03KS – ACC03.01.01KS – ACC03.01.05KS – ACC07.01KS – TRC03KS – TRC07 KS – ESS03.01 KS – ESS03.02 KS – ESS03.03KS – SCPA10.01.04STL8E-GSTL9.F-HSTL11.H  | MA6.2.4 (1)MA6.2.5 (1)CCSS: MA(6.G.1) (1)SC8.1.3 (2) |
| **Standard 4.** **Students will define Technology.** |   |  |
| Benchmark 4.1 The student will understand the core concepts of technology.Sample performance indicators:* Human made
* Product and process
* Systems model
* Invention and innovation
 | KS - MNC10.01.02 KS - MNC05 KS – ACC05KS – TRC07 STL1.F-HSTL2.M-P,TSTL7.F  |  |
| Benchmark 4.2 The student will be aware of technological impactsSample performance indicators:* Cost and benefits
* Societal responsibilities
 | KS - MNC10.01.02KS – MNC05.01.03KS – ACC08.01.01KS – ACC08.01.03STL4.D-GSTL5.D-FSTL6.D-GSTL7.C |  |
| **Standard 5**. **Students will explore career opportunities.**  |  |  |
| Benchmark 5.1 The students will examine and report on the Skilled and Technical Sciences (STS) Career Field. Sample performance indicators:* Architecture & Construction
* Manufacturing
* Science, Technology, Engineering, & Math (STEM)
* Transportation, Distribution, & Logistics (TDL)
 |  KS – MNC04KS – MNC09KS – ACC04KS – ACC05.03.01KS – ESS09.07KS – SCC09.01STL18.F-GSTL19.HSTL20.F-I |  |
| Benchmark 5.2 The students will explore and report on emerging technologies.Sample performance indicators:* Robotics
* Nanotechnology
* Green Technologies
* Space Exploration
* Energy
 | KS – MNC04KS – MNC09KS – ACC04KS – ACC10.02.02STL14.GSTL15.F,HSTL16.E-FSTL17.HSTL18.FSTL19.F-G |  |

### Reference Standards Sources

* KS = Career Clusters Knowledge and Skills Statements. Revised 2008. National Career and Technical Education Foundation, Silver Spring, MD. www.careerclusters.org.
* (additional reference standards listed)

### Contributors

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