

## ***NCCER Instrumentation Level 4 (Technical Diploma)***

This program is designed to prepare students to work efficiently as an Instrument Fitter and Technician. Instrument Fitters and Technicians perform key installation and maintenance functions across several industries. The field of instrumentation covers important processes and knowledge areas, including piping, tubing, fasteners, and metallurgy. Instrument Fitters and Technicians are familiar with electrical systems, craft-specific drawings, and are experts in the hand and power tools specific to their trade. This program covers four levels of training based on curriculum developed by the National Center for Construction Education and Research (NCCER). NCCER's curriculum addresses all of the learning objectives associated with this broad and demanding field, in areas such as Fasteners, Relays and Timers, and Grounding and Shielding of Instrumentation Wiring. Students who successfully complete the program will be nationally certified by NCCER.

A career and technical certificate (CTC) may be earned in the first semester and a certificate of technical studies (CTS) may be earned in the second semester; a technical diploma may be earned upon completion of all technical courses. Students also have the option to complete the Technical Studies Associate of Applied Science with a concentration in Instrumentation by completing General Education courses in addition to the technical courses.

To receive any credential in this program, the student must:

- Complete the program of study below.
- Earn a "C" or better in all courses that are to be used toward the credential.

### **Program Outcomes. Upon successful completion of the program, the graduate will be able to:**

1. Employ proper techniques for use and storage of instrumentation equipment.
2. Categorize common instrumentation systems, components, and their uses.
3. Inspect instrumentation systems and components.
4. Integrate various devices to construct an instrumentation system.

### **Program of Study**

<b>First Semester</b>		<b>Credit Hours</b>
CORE 1003	Introduction to Craft Skills	3
INST 1119	Instrumentation Level 1	9
INST 1216	Instrumentation Level 2 Part 1	6
<b>Semester Total:</b>		<b>18</b>
<b>Second Semester</b>		<b>Credit Hours</b>
INST 1226	Instrumentation Level 2 Part 2	6
INST 1316	Instrumentation Level 3 Part 1	6
INST 1326	Instrumentation Level 3 Part 2	6
<b>Semester Total:</b>		<b>18</b>
<b>Third Semester</b>		<b>Credit Hours</b>
INST 1419	Instrumentation Level 4	9
<b>Semester Total:</b>		<b>9</b>
<b>Total Program Credit Hours:</b>		<b>45</b>

**Instrumentation Credentials Available:**

		<b>Credit Hours</b>
CORE 1003	Introduction to Craft Skills	3
INST 1119	Instrumentation Level 1	9
<b>CTC: NCCER Instrumentation Level 1</b>		<b>12</b>

		<b>Credit Hours</b>
CORE 1003	Introduction to Craft Skills	3
INST 1119	Instrumentation Level 1	9
INST 1216	Instrumentation Level 2 Part 1	6
INST 1226	Instrumentation Level 2 Part 2	6
<b>CTS: NCCER Instrumentation Level 2 (Level 1 and Level 2 courses)</b>		<b>24</b>

		<b>Credit Hours</b>
CORE 1003	Introduction to Craft Skills	3
INST 1119	Instrumentation Level 1	9
INST 1216	Instrumentation Level 2 Part 1	6
INST 1226	Instrumentation Level 2 Part 2	6
INST 1316	Instrumentation Level 3 Part 1	6
INST 1326	Instrumentation Level 3 Part 2	6
INST 1419	Instrumentation Level 4	9
<b>TD: NCCER Instrumentation Level 4 (Level 1, Level 2, Level 3, and Level 4 courses)</b>		<b>45</b>

Students interested in pursuing the Technical Studies Associate of Applied Science degree with a concentration in Instrumentation should contact the Technical Education Division at 225-216-8367 for more information.