Core Competencies

Frequently Asked Questions

*What are the core competencies?*

Core competencies provide a set of performance indicators - a series of industry validated skill sets that have been identified as being critical for technologists to be proficient in their respective job functions. Delineating core competencies assists instructors in determining subjects that the student needs. Competencies also assist industry in training and hiring practices.

*Why are there two major sections, one for general technologists and another for specific technologists?*

The two sections have been developed to address the needs of a broad spectrum of industries. These industries may need technologists with a wide variety of skills. The general technologist set of skills listed first are defined specifically for technologists that are in manufacturing environments, and they are considered core skill sets. They are required on some level for each of the technician competency sets so are included in all of the specialty areas.

The specific technologist skills have been outlined for those technicians that are explicitly responsible for setting up, maintaining and troubleshooting a specialty product lines such as materials, corrosion, nano or marine.

*How do I use the MatEdU core competencies?*

The core competencies can be used in multiple ways:

- A tool to assist educators to create curriculum that is tied to one or more competencies.
- A comparison means to modify existing curriculum in order to ensure that it meets specific industry competencies by identifying existing gaps.
- Industry can use them to write job descriptions or to develop training or professional development plans.
- An instrumental asset in developing competency exams or certifications.

*The lists of competencies are lengthy. How do I know where to place my initial focus?*

There is a number 1 designation next to every competency that is vital to that particular technician position. Without that competency, they may be unable to do the job adequately or could benefit from additional training. Competencies that are not vital but are important will show a rating of 2. Desirable but not necessary competencies will have a 3 listed.

*Who decided what competencies should be included in each specialty area?*

The competencies were all vetted by an industry focus group that spent time discussing and agreeing to each of the competency ratings. Participants include those that are considered technically adept, individuals with hiring or supervision authority for technicians, educators
charged with teaching potential technicians and industry representative with an interest in technician success. Competencies were decided using a consensus-building approach.

*If I want core competencies for another specialty area, could I work with you to develop those?*

Yes, we could potentially assist you to create a set of competencies. We facilitate the focus group, draft the competencies and validate them. You would identify the focus group for that specialty area and host the meeting. If you are interested in discussing this further, contact us at MatEdU@edcc.edu