

Career Explorer - Student Scale

Explore Engineering Fields and Express your Career Interests

Learn, practice and apply field specific skills to design projects in order to improve your understanding of which fields of engineering you are most interested in.

4	I can... Discuss with knowledge and experience which fields of engineering I am most interested in.	3A	I can... - Use vocabulary, concepts, equations, tools, and systems to solve a problem related to a specific field of engineering. - Design, create, and test working models of systems related to a specific field of engineering.	3B										
3	I can... - Name and describe several fields of engineering. - Describe career path options for jobs related to a variety of engineering fields. - Research online to learn about a career I am interested in and/or ask questions of engineers, professionals, and guest speakers.		I can... - Apply knowledge of a specific engineering field to develop a design. - Apply standard equations to solve mathematical problems related to a specific field of engineering. - Safely use tools and materials to create and test a working model of a system related to a field of engineering.											
2	I can recall and define the following vocabulary... <table><tr><td>Nuclear Engineering</td><td>Computer Science</td></tr><tr><td>Mechanical</td><td>Manufacturing</td></tr><tr><td>Electrical</td><td>Electronic</td></tr><tr><td>Civil Engineering</td><td>Structural</td></tr><tr><td>Aerospace Engineering</td><td>Biomedical Engineering</td></tr></table>	Nuclear Engineering	Computer Science	Mechanical	Manufacturing	Electrical	Electronic	Civil Engineering	Structural	Aerospace Engineering	Biomedical Engineering		I can perform basic procedures and operations such as: - Designing an electric circuit using knowledge of Ohm's Law. - Designing a mechanical system with a desired mechanical advantage. - Calculating stress in bridge members when supporting a variety of loads. - Designing a pneumatic system to produce a needed output force using Pascal's Law. - Design a fixed-wing glider that minimizes drag and optimizes lift. - Program a robot to use sensors to perform a specific task reliably.	
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Electrical	Electronic													
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1	I can have partial success at a level 2.		I can use: - Appropriate tools safely to make a model a field specific system. - Precision measuring devices appropriate to a specific field.											