

ION Corporation's Use of the Engineering Design Process

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ION Corporation

Our team chose ION Corporation which was established in 1984. ION Corporation excels in innovative engineering, manufacturing, and testing solutions. They applied their skills beyond the Earth and provided engineering services to integrate, maintain, and upgrade environmental control and life support subsystems for the NASA International Space Station. We chose them for their project management and engineering expertise.

We met the founder of ION Corporation, Wendell Maddox, at the fourth session of the NEON Community Conversations 4.0 Series. We asked several questions about ION Corporation. Their answers about STEM fields and engineering design were exemplary.



The Capytech team (Demetrius could not be present) with Wendell Maddox.

ION Corporation is knowledgeable about Lean Six Sigma and EVM practices, utilizing them well in project management. They use the Integrated Product Team approach to make sure that integrated decisions which affect the design of the product are effective. Clearly, ION Corporation has better plans and procedures for the engineering design process than us.

We work out problems through the engineering design process by defining the problem and remembering the information we've learned. We think of the parameters and brainstorm a solution. After evaluating the solution we've chosen, we develop it thoroughly and test it soon after.

VEX & STEM Fields

During the participation of VEX, you learn multiple skills like problem solving and how to work as a team. These are crucial when you go into a STEM field. You also gain information about engineering, designing, programming and communication.

Wendell Maddox gave us advice on how to work well in STEM fields. He told us we must have a good work ethic and be passionate. You must stay connected to the STEM field you want to go in and continue learning about it all the time. Quantum was a major idea that he talked about, as quantum technology and quantum mechanics are years faster than other things. Because most of us want to continue our lives into a STEM field, we took this gracious advice to heart.



ION Corporation logo.

In conclusion, we strive for our engineering design process and project management to work as well as a full-fledged company. Participation in VEX Robotics provides an opportunity to prepare you for future careers in STEM fields, especially engineering.