**Career Exploration**

The five IT paths available at Western TC are : IoT Integration Specialist, IT-Computer Support Specialist, IT-Cybersecurity & Network Administration, IT-Data and Analytics Specialist, and IT-Web & Software Developer. The IoT Integration Specialists design and develop systems through the integration of hardware with software platforms. They focus on computer programming and networking as well as needing to have good hands-on skills. Trouble shooting is a big part of their duties. The IT-Computer Support Specialist provide technical assistance whether that is in network, hardware, or software. Trouble shooting is a large part of their role. The IT-Cybersecurity & Network Administrators help to maintain an organization’s network through the daily maintenance and stabilizing of the operation. IT-Data & Analytics Specialists collect, analyze and provide reports on data for business decisions. They help to improve the efficiency and performance of organizations. The IT-Web & Software Developers focus on designing, developing and writing and testing code to help maintain websites, apps, and software. They often are fluent in computer languages such as Python and C++.

The biggest overlap between all five paths is, at the core, programming and writing code. Each path has a different level of programming and code writing, but it is important for each path to be proficient in. The IoT Integration Specialist and IT-Computer Support Specialist may have more overlap when it comes to troubleshooting for others. , IT-Cybersecurity & Network Administration and IT-Web & Software Developer may have overlap when it comes to programming as both paths require using tools related to programming and scripting.

The one path that stands out the most is IT-Data and Analytics Specialist as it does not focus on the programming and coding but rather data gathering and analysis. While the other paths will also gather data and analyze it, they do that for different purposes such as troubleshooting a problem to help maintain the system. IoT Integration Specialist and IT-Computer Support Specialist differ in that the IT-Computer Support Specialist is much more hands-on and may have to work with hardware. IT-Cybersecurity & Network Administration and IT-Web & Software Developer differ in that the IT-Cybersecurity & Network Administrators focus on keeping the system running rather than developing code to run the system.

The IoT Integration Specialist does not appeal to me because focusing on communication and networking is not important to me. The idea of keeping the system running is not of interest to me. The same applies to the IT-Cybersecurity & Network Administration path. The IT-Computer Support Specialist path also does not appeal to me because I have friends and family in those roles and am aware of what they do daily. I would prefer to not be as hands on or work as “help desk”. The IT-Web & Software Developer does appeal to me but due to the level of coding and programming required, I feel that I would not be a good fit for that role until I have a stronger understanding of coding. The IT-Data and Analytics Specialist appeals to me the most because of the less demanding coding requirements as well as my work history dealing with data. I feel the most comfortable in this role because I am more familiar with what is required to be a successful Data Analyst.

The role that I knew the least about was the IT-Web & Software Developer. What surprised me the most was the complexity of coding. Learning about how to use certain computer languages and operating systems was an eye opener for me. It really showed me how little I understood what is required to be a competent programmer, and that I have a lot to learn. The idea of virtualization and cloud computing were new to me, and it surprised me that these systems have existed for a while but the majority of the public never knew about them. Knowing now that I can launch Linux from a flash drive is something I did not expect to be able to complete from this course alone.

The most interesting thing that I realized was that I could follow conversation on using different operating systems that I would not have understood 3 months ago. I was afraid I wouldn’t be able to understand the IT field, but this class showed me that it is possible and that I can be successful in my chosen field. I now believe that with effort, I can make a significant career change and be confident in doing so.