

## Essential Skills

# Creative Path – Information Technology

This career path focuses on answering questions/resolving computer problems for clients in person, via telephone, or electronically. Additionally helping with the use of computer hardware and software, including printing, installation, word processing, electronic mail, programming/coding and operating systems is common in this path.

## Creative Path – Information Technology Programs at Great Oaks

Program	Location
Coding & Web Design	Diamond, Scarlet
Information Technology	Laurel
IT Academy	Live

## Frequently Used Pathway Skills/Abilities

Each career path has a specific set of skills/abilities that employees need for success in the industry. It is recommended that students have, are developing or can develop the skills/abilities listed below.

Sharpness of vision/hearing acuity	<ul style="list-style-type: none"><li>• Distinguish details/differences visually</li><li>• Differentiate various sounds</li><li>• Perceive distance/depth of objects in space</li></ul>
Communication	<ul style="list-style-type: none"><li>• Express/explain thoughts and ideas</li><li>• Write/document/record information accurately</li><li>• Listen/relay accurate information in written/verbal manner</li><li>• Follow multi-step instructions in sequence</li><li>• Read and interpret technical information</li><li>• Understand important details in verbal and tabular formats</li><li>• Social communication (appropriate social media/workplace conversations)</li></ul>
Physical mobility/strength Eye-hand coordination/dexterity	<ul style="list-style-type: none"><li>• Stoop/bend/walk/carry items safely</li><li>• Use electronic equipment and troubleshoot issues</li><li>• Work in small/confined areas and use ladders</li><li>• Fine motor skills (precision hand tools/small screws/cables/wires/electronic parts)</li><li>• Lift and carry heavy objects (up to 50 pounds)</li></ul>
Problem-solving/reasoning	<ul style="list-style-type: none"><li>• Develop/follow sequenced activities accurately</li><li>• Work independently with minimal supervision</li><li>• Ability to solve challenging problems without clear answers (persistence)</li><li>• Determine courses of action after reading/watching instructional content</li><li>• Maintain accurate records/problem-solving steps/cabling schematics</li><li>• Apply mathematical logic (programming/electrical power requirements)</li><li>• Understand/decipher what others need to solve problems</li></ul>

## Technology and Software

All career & technical education programs utilize various software and industry-specific equipment to prepare students for careers. Students will independently access and use various online resources, technology, and equipment.

Here is an overview of key online and computer technology used in this pathway:

Vendor	Software/Learning Management System
Certiport	Gmetrix online learning/pretesting platform
Schoology/Canvas	Learning management systems
Microsoft Office	Word, PowerPoint, Excel and Outlook
Internet Browsing	Conduct career-related independent and group research

## Industry Credentials/Certifications

Credentials/certifications demonstrate career-ready knowledge and skills. They are typically earned by successfully completing an exam or training program. Exams are developed by industry professionals, not high school educators, and are used to verify that students have the skills needed for work.

Students can earn industry credentials/certifications while at Great Oaks. Accommodations are available but are subject to vendor or State of Ohio approval. Typical accommodations for industry-related credentials/certifications include:

Extended time

Read-aloud/translation services

## Post-secondary

Great Oaks offers college credit courses in both academic and career technical programs.

College Credit Plus (CCP) • The CCP program provides Ohio high school students an opportunity to complete college courses and earn transcribed credit.

Career Technical Assurance Guides (CTAGs) • CTAGs award college credit for career-technical coursework to students who complete an approved course and earn a qualifying score on the end of course exam or, in some cases earn an industry credential.

Articulated Credit • Some Great Oaks career-technical programs have agreements with colleges where students can earn credit toward a specific degree.

## Additional Pathway Considerations

Some career pathways have additional standards students must meet to fully participate in Great Oaks programs. Programs in this pathway have additional recommendations to fully experience learning opportunities and earn industry credentials/certifications.

Academic strengths

- Science (electronics/electricity)
- Math (ratios/arrays/binary/hexadecimal/logic/flowcharts)
- Oral/written communication

Safety

- Work safely with electronic equipment (disconnect/discharge stored power)
- Work safely with sharp parts
- Work safely with precise/fragile/small parts

Career expectations

- Solve problems that many have multiple correct solutions (programming)
- Troubleshoot issues that may have multiple problems
- Understand ethical considerations of using digital content (copyright/AI/privacy)
- Set up/configure equipment (monitors, wireless networks/printers)
- Read/understand cabling diagrams
- Develop/follow complex multi-step instructions
- Communicate technical information to non-technical clients