

## NO RTEC JOB SPECIFIC SKILLS COMPETENCY

### COMPUTER PROGRAMMER DOT CODE: 030.162-010 SVP 7

*Job Description: Converts data from project specifications and statements of problems and procedures to detailed logical flowcharts for coding into computer language; develops and writes computer programs to store, locate, and retrieve specific documents, data and information.*

#### CORE SKILL COMPETENCIES/INDICATORS:

1. Can demonstrate ability to read and interpret descriptions prepared by software engineers or systems analysts. (R, IN, S)
2. Can demonstrate ability to consult with managerial and engineering and/or technical personnel to clarify program intent, identify problems, and suggest changes. (R, IN, I, S, T)
3. Can demonstrate ability to define job to be processed and determine equipment requirements and capabilities. (R, IN, S, T)
4. Can demonstrate ability to prepare detailed workflow chart and diagrams to illustrate sequence of steps that program must follow, and to describe input, output, and logical operations involved. (R, IN, S)
5. Can demonstrate ability to convert detailed logical flowchart to language processible by computer. (R, IN, S)
6. Can demonstrate ability to enter program codes and test data into computer, using keyboard. (R, IN, S)
7. Can demonstrate ability to observe computer monitor screen to correctly interpret program operating codes. (R, IN, S, T)
8. Can demonstrate ability to correct errors and debug program. (R, IN, S, T)
9. Can demonstrate ability to compile and write documentation of program development and subsequent revisions. (IN, S)
10. Can demonstrate ability to write clear instructions to guide operating personnel during production runs. (R, IN, S)
11. Can demonstrate ability to assist computer operators or system analyst to resolve problems in running computer program. (R, IN, I, S)
12. Can demonstrate ability to resolve symbolic formulations and encode resultant equations for processing. (IN, S)
13. Can demonstrate ability to update, repair, modify, or expand existing programs to increase operating efficiency or adapt to new requirements. (R, IN, S)
14. Can demonstrate knowledge of traditional, as well as more advanced object-oriented programming languages, such as *FORTRAN, COBOL, Java, Visual Basic*, etc. (R, IN, S, T)
15. Can demonstrate knowledge of a variety of operating systems, such as *Windows, DOS, UNIX*, etc. (R, IN, S, T)
16. Can demonstrate familiarity with spreadsheet and data base management languages, such as *Microsoft ACCESS*. (R, IN, S, T)
17. Can demonstrate familiarity with management information systems. (R, IN, S, T)
18. Can demonstrate correct utilization of tools used to eliminate routine coding steps, such as *Computer Aided Software Engineering (CASE)*. (R, IN, S, T)
19. Can demonstrate ability to prepare accurate records and reports. (R, IN, S)
20. Can demonstrate ability to perform arithmetic operations quickly and accurately. (IN, S)
21. Can demonstrate ability to work under stress to meet schedule deadlines. (R, I)
22. Can demonstrate excellent active listening and communication skills. (IN, I)