



## Information Technology Job Family: **Applications Programmer Progression**

These generic job title summaries are intended to indicate the kinds of tasks and levels of work complexity that will be required of positions classified to any of these titles and are not intended to be construed as declaring the specific duties and responsibilities of any particular position. The use of particular expressions or illustrations describing functions within a specific job title does not exclude other duties of a similar kind and/or level of complexity. Positions are classified to a particular job title based upon the predominant level of expected work complexity. ***A position that is classified into this title and band must meet the Cornell requirements for exemption under the FLSA***

May use programming languages such as, but not limited to: ASP/.NET, PHP, JavaScript, DHTML, Perl, SQL, MySQL, XML, XSL, AJAX, ColdFusion, C#, Java  
This title progression includes applications developed for the web and mobile applications.

### GENERIC JOB PROFILE SUMMARIES

Applications Programmer II INDIVIDUAL CONTRIBUTOR	Applications Programmer III INDIVIDUAL CONTRIBUTOR	Applications Programmer IV INDIVIDUAL CONTRIBUTOR
Assists in working with users in determining problem analysis and resolution.	May communicate with users for needs analysis and provide resolution.	Works with and may be responsible to users for needs analysis and provide resolution.
	Establish and contribute to a detailed program specification through discussion with clients	Develop a detailed program specification through discussion with clients
Designs, codes, tests, debugs, documents programs or systems of low to moderate complexity.	Designs, codes, tests, debugs, documents and maintains programs or systems of moderate complexity; develop enhancements that enable a positive end-user experience	Designs, codes, tests, debugs, documents and maintains highly complex programs or systems; develop enhancements that enable a positive end-user experience
Assists in research and fact-finding to develop or modify software systems of low to moderate complexity.	Assists in research and fact-finding to develop or modify software systems of moderate complexity; Formulates and defines system scope and objectives to develop or modify moderately complex software systems.	Formulates, defines system scope and objectives to develop or modify highly complex software systems.
Research, document, and modify software specifications throughout the production life cycle	Research, design, document, and modify software specifications throughout the production life cycle	Research, design, document, and modify software specifications throughout the production life cycle

Applications Programmer II INDIVIDUAL CONTRIBUTOR	Applications Programmer III INDIVIDUAL CONTRIBUTOR	Applications Programmer IV INDIVIDUAL CONTRIBUTOR
	Completes and documents phases of projects.	Defines projects, organizes a project team and directs project activities
	Provides technical guidance to less experienced programmer/ analyst.	Provides technical guidance to less experienced programmer/ analyst; may instruct, direct and check the work of other application developers
May assist in planning, implementing, tracking and/or reporting on low to moderately complex projects.	Creates and implements project specifications/plans for projects with straightforward inter-dependency with other systems and/or projects.	Creates and implements project specifications/plans for projects with significant inter-dependency with other systems and/or projects.
Modifies application programs from detailed specifications	Modifies moderately complex application programs from detailed specifications	Modifies complex application programs from specifications
Review code written by peers to ensure that it is valid, is properly structured, meets project standards and is compatible with browsers, devices, or operating systems	Evaluate code to ensure that it is valid, is properly structured, meets industry standards and is compatible with browsers, devices, or operating systems	Evaluate code to ensure that it is valid, is properly structured, meets industry standards and is compatible with browsers, devices, or operating systems
Modify procedures to solve low to moderately complex problems considering computer equipment capacity and limitations, operating time and form of desired results	May develop or modify procedures to solve moderately complex problems considering computer equipment capacity and limitations, operating time and form of desired results	Develop or modify procedures to solve complex problems considering computer equipment capacity and limitations, operating time and form of desired results
Validate test routines and schedules to ensure that test cases mimic external interfaces and address all browser and device types.	Validate test routines and schedules to ensure that test cases mimic external interfaces and address all browser and device types.	Develop and validate test routines and schedules to ensure that test cases mimic external interfaces and address all browser and device types.
		Act as team leader for projects with small budgets of limited duration
Amend software errors in a timely and accurate fashion and provide status reports where required	Analyze and amend software errors in a timely and accurate fashion and provide status reports where required	Analyze and amend software errors in a timely and accurate fashion and provide status reports where required
Collaborate with project team members including project manager, business analysts, subject matter experts, other developers and quality assurance specialists.	Collaborate with project team members including project manager, business analysts, subject matter experts, other developers and quality assurance specialists.	Collaborate and coordinate with project team members including project manager, business analysts, subject matter experts, other developers and quality assurance specialists.

## JOB FACTOR PROFILE TABLE

FACTOR PROFILE	11471 APPLICATIONS PROGRAMMER II, BAND E	11472 APPLICATIONS PROGRAMMER III, BAND F	11473 APPLICATIONS PROGRAMMER IV, BAND G
<b>MINIMUM EDUCATION AND EXPERIENCE EQUIVALENCY</b>	Bachelor's degree; up to 2 years experience or equivalent	Bachelor's degree; more than 3 year and less than 5 years experience or equivalent	Bachelor's degree; more than 5 year and less than 7 years experience or equivalent
<b>IMPACT</b>	Moderate impact	Moderate impact	Substantial impact
<b>CONTACTS - INSIDE</b>	Assist others Cooperation of task completion	Provides guidance to others Coordinates activities	Persuade others to take particular course of action Coordinate major activities
<b>CONTACTS - OUTSIDE</b>	Provide/receive guidance, advice or information that must be analyzed and developed by the position	Provide/receive guidance, advice or information that must be analyzed and developed by the position	Develop and make presentations and negotiate with others
<b>CONTACTS - STUDENTS</b>	Limited contact	Limited contact	Limited contact

FACTOR PROFILE	11471 APPLICATIONS PROGRAMMER II, BAND E	11472 APPLICATIONS PROGRAMMER III, BAND F	11473 APPLICATIONS PROGRAMMER IV, BAND G
<b>SUPERVISION</b>	Provides guidance, counsel, and information in specific support areas	Provides guidance, counsel, and information in specific support areas	Provide on-the-job training, guidance, advice and counsel to other employees in the group and others in a similar position
<b>COMPLEXITY</b>	Frequently adapt, combine, or make improvements to services, products, processes, & programs. Work requires reasoning skills and judgment	Occasionally required to develop new innovative solutions, services, products, processes, & programs. Work requires sophisticated reasoning skills	Continually required to develop new innovative solutions, services, products, processes, & programs. Work requires conceptual and imaginative thinking in a highly complex environment
<b>LEVEL OF DECISION MAKING</b>	Assist in and influence decisions concerning policy-setting, research, planning, or students	Assist in and influence decisions concerning policy-setting, research, planning, or students	Assist in and influence decisions concerning policy-setting, research, planning, or students
<b>FREEDOM OF ACTION</b>	General supervision Some interpretation of established work policies and procedures is required	Very general supervision Interpretation of work policies and procedures, and, at times deviation from standard work practice	Very general supervision Interpretation of work policies and procedures, and, at times deviation from standard work practice
<b>EFFECT OF DECISION MAKING</b>	Directly effects multiple functional areas Limited effect on students and employees	Directly effects entire department Moderate effect on students and employees	Directly effects several depts within a college Significant effect on students and employees
<b>WORKING CONDITIONS</b>	Normal working conditions, including limited or no exposure to hazardous conditions/materials/ equipment. Safety gear may sometimes be required	Normal working conditions, including limited or no exposure to hazardous conditions/materials/ equipment. Safety gear may sometimes be required	Normal working conditions, including limited or no exposure to hazardous conditions/materials/ equipment. Safety gear may sometimes be required