



Technical Job Family: **Systems Operator 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.

GENERIC JOB PROFILE SUMMARIES

Systems Operator I INDIVIDUAL CONTRIBUTOR	Systems Operator II INDIVIDUAL CONTRIBUTOR
Assist with the operation, maintenance, and development of a large experimental physics facility, including computer-assisted equipment operation, maintenance of safety and security, and equipment maintenance.	Assist with, and may oversee, the operation, maintenance, and development of a large experimental physics facility, including computer-assisted equipment operation, maintenance of safety and security, equipment maintenance, and development of new equipment and procedures.
Operate electronic test equipment such as oscilloscopes, spectrum analyzers, and signal generators, and diagnose problems with sophisticated experimental equipment.	Operate electronic test equipment such as oscilloscopes, spectrum analyzers, and signal generators, and diagnose problems with sophisticated experimental equipment.
Operate various accelerator systems: electron gun, RF cavities, solenoids, power supplies, pulse forming networks, superconducting and normal conducting magnet systems, water and electrical systems, control systems, computers, timing system, vacuum pumps, etc. Adjust parameters as needed to provide and maintain the machine conditions required or requested.	Operate various accelerator systems: electron gun, RF cavities, solenoids, power supplies, pulse forming networks, superconducting and normal conducting magnet systems, water and electrical systems, control systems, computers, timing system, vacuum pumps, etc. Adjust parameters as needed to provide and maintain the machine conditions required or requested.
Prepare documentation for operational procedures.	Produce detailed documentation, written or graphic, for operational procedures and systems.
Perform lock-out-tag-out (LOTO) of electrical systems, monitor and reset interlocks, monitor and respond to various trouble alarms and displays, maintain areas that may possibly affect the operations and safety of people, facilities, and systems, and secure systems for access.	Perform lock-out-tag-out (LOTO) of electrical systems, monitor and reset interlocks, monitor and respond to various trouble alarms and displays, maintain areas that may possibly affect the operations and safety of people, facilities, and systems, and secure systems for access.
Investigate, diagnose, and trouble-shoot systems to determine failure mode and appropriate response, which may include calling appropriate experts or performing repairs.	Investigate, diagnose, and trouble-shoot systems to determine failure mode and appropriate response, which may include calling appropriate experts or performing oversight and coordination of repairs.
Assist in accomplishing the laboratory's projects and goals, ranging from physical, repetitive tasks, to sophisticated, higher-level or specialized skills.	Assist in accomplishing the laboratory's projects and goals, ranging from physical, repetitive tasks, to sophisticated, higher-level or specialized skills.

**Systems Operator I
INDIVIDUAL CONTRIBUTOR**

**Systems Operator II
INDIVIDUAL CONTRIBUTOR**

Cover operator shifts as needed, and provide laboratory tours.	Train and mentor junior operators. Cover operator shifts as needed, and provide laboratory tours.
Assist with special projects as needed.	Oversee and coordinate special projects as needed.

JOB FACTOR PROFILE TABLE

FACTOR PROFILE	10935 SYSTEMS OPERATOR I, BAND D	10936 SYSTEMS OPERATOR II, BAND E
MINIMUM EDUCATION AND EXPERIENCE EQUIVALENCY	Associate's degree or equivalent; more than 2, but less than 4 years or equivalent	Bachelor's degree or equivalent; more than 4, but less than 6 years or equivalent; 4 years as a Systems Operator I
IMPACT	Extend beyond the college/unit	Extend beyond the college/unit
CONTACTS - INSIDE	Coordinate activities Contribute to group projects	Coordinate activities Contribute to group projects
CONTACTS - OUTSIDE	Conduct straightforward business Provide general factual information	Conduct somewhat complex business activities Obtain involved information or provide detailed response
CONTACTS - STUDENTS	Provide information or instruction on policies/procedures	Provide training and instruction on equipment, instruments, machinery, methods

FACTOR PROFILE	10935 SYSTEMS OPERATOR I, BAND D	10936 SYSTEMS OPERATOR II, BAND E
SUPERVISION	Student Temporaries On-the-job training	Group leader Supervise employees who perform similar work Full responsibilities for students and temporary employees
COMPLEXITY	Focus on an entire field	Focus on an entire field
LEVEL OF DECISION MAKING	Responsible for making some decisions which require consideration of various criteria. Decisions are usually within limits prescribed by established policies or the supervisor	Responsible for making some decisions which require consideration of various criteria. Decisions are usually within limits prescribed by established policies or the supervisor
FREEDOM OF ACTION	Very general supervision Resolve most questions Accomplish most work alone Keep supervisor informed of progress	Little guidance Accomplish work activities Rarely referring situation to the supervisor
SUPPORT SKILLS – WRITING	Provide a non-standard response or prepare written material that requires some research	Provide a non-standard response or prepare written material that requires some research
SUPPORT SKILLS – COMPUTER	Use business or technical programs to complete tasks requiring sophistication in usage	Uses a variety of business or technical programs to complete information management or production tasks
WORKING CONDITIONS - PHYSICAL	Lift 20 to 50 lbs.	Lift 20 to 50 lbs.

FACTOR PROFILE	10935 SYSTEMS OPERATOR I, BAND D	10936 SYSTEMS OPERATOR II, BAND E
WORKING CONDITIONS - VISUAL	Close concentration and visual attention	Close concentration and visual attention
WORKING CONDITIONS - HAZARD	Equipment requiring extreme safety precautions. Protective devices necessary	Equipment requiring extreme safety precautions. Protective devices necessary