NOVARTIS

ITOT Engineer

Job ID
REQ-10085812
Aug 25, 2026
LOC_US

About the Role

Key Responsibilities:

- ITOT Systems Support: Support, troubleshoot, and enhance ITOT systems including PLCs, HMIs, EMS, BMS, and PC-based control applications to maintain reliability of manufacturing and facility operations. Manage user access, account administration, and periodic reviews.
- IT/OT Infrastructure Support: Assist with maintaining IT/OT infrastructure (servers, virtual machines, network devices, application hosting, backup and disaster recovery), coordinating with IT teams on cybersecurity and system integrity.
- CSV Activities: Support Computer System Validation (CSV) activities, including generation and execution of Installation Qualification (IQ) and Operational Qualification (OQ) protocols, to ensure ITOT systems meet regulatory and operational requirements.
- Compliance & Quality Documentation: Support authoring and review of GMP documentation including deviations, change controls, CAPAs, validation protocols, and risk assessments, in alignment with 21 CFR Part 11 and GxP requirements. Participate in audits and inspections by regulatory authorities and internal quality organizations.
- Investigation & Continuous Improvement: Support technical investigations into system failures and deviations, assist with root cause analysis, and contribute to initiatives that improve system performance and efficiency.
- Project Support: Support ITOT and digital transformation projects from concept through commissioning, including FAT/SAT activities, ensuring alignment with GMP, safety, and engineering standards.
- Digital Transformation: Support digital transformation initiatives within manufacturing operations, including driving AI initiatives, process automation, and robotics projects, in collaboration with cross-functional teams.
- CAPEX & New Line Commissioning: Support CAPEX projects to install, qualify, and commission new production lines, coordinating ITOT scope with engineering, project management, and vendor teams.
- Essential On-Call Coverage: Provide on-call support on a rotation basis to support the 24/7 manufacturing facility, promptly addressing ITOT system issues to minimize downtime and maintain continuous production.

Requirements:

- Education: Bachelor's degree in Engineering, Automation Engineering, Electrical Engineering, Computer Engineering, Computer Science, or a related technical discipline.
- Experience: 2–3 years of hands-on experience with manufacturing control systems such as PLC or DCS, with familiarity setting up IT infrastructure to support OT technologies such as PLCs, DCS, MES, and PI Historians.
- Industry Knowledge: 2–3 years of experience in the pharmaceutical or biotechnology industry with a solid understanding of Good Manufacturing Practices (GMP) and regulatory compliance.
- Proficiency with PLCs (e.g., Allen-Bradley, Siemens) or Distributed Control Systems (DCS), and familiarity with Manufacturing Execution Systems (MES).
- Working knowledge of EMS/BMS platforms and industrial networking.
- Understanding of GMP/GxP regulations, 21 CFR Part 11, and CSV/CSA methodologies, including IQ/OQ protocol generation and execution.
- Familiarity with Change Control, CAPA processes, and root cause analysis.
- Effective communication skills with ability to coordinate across multidisciplinary teams and vendors. Fluency in English.

Commitment to Diversity & Inclusion:

We are committed to building an outstanding, inclusive work environment and diverse teams representative of the patients and communities we serve.

Why Novartis?
Our purpose is to reimagine medicine to improve and extend people's lives and our vision is to become the most valued and trusted medicines company in the world. How can we achieve this? With our people. It is our associates that drive us each day to reach our ambitions. Be a part of this mission and join us! Learn more here:
https://www.novartis.com/about/strategy/people-and-culture

Join our Novartis Network: If this role is not suitable to your experience or career goals but you wish to stay connected to learn more about Novartis and our career opportunities, join the Novartis Network here:
https://talentnetwork.novartis.com/network

Accessibility and accommodation:
Novartis is committed to working with and providing reasonable accommodation to all individuals. If, because of a medical condition or disability, you need a reasonable accommodation for any part of the recruitment process, or in order to receive more detailed information about the essential functions of a position, please send an e-mail to and let us know the nature of your request and your contact information. Please include the job requisition number in your message.

The salary for this position is expected to range between $98,700 and $183,300 per year.

The final salary offered is determined based on factors like, but not limited to, relevant skills and experience, and upon joining Novartis will be reviewed periodically. Novartis may change the published salary range based on company and market factors.

Your compensation will include a performance-based cash incentive and, depending on the level of the role, eligibility to be considered for annual equity awards.

US-based eligible employees will receive a comprehensive benefits package that includes health, life and disability benefits, a 401(k) with company contribution and match, and a variety of other benefits. In addition, employees are eligible for a generous time off package including vacation, personal days, holidays and other leaves.

To learn more about the culture, rewards and benefits we offer our people clickhere.

Role Requirements

Division
DIV_TO
Business Unit
Information Technology
Location
LOC_US
Site
Carlsbad
Company / Legal Entity
U061 (FCRS = US061) Novartis Services, Inc.
Functional Area
FCT_TO
Job Type
Full time
Employment Type
Regular
Shift Work
No
Apply to Job

Job ID
REQ-10085812

ITOT Engineer

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