



**USC** University of  
Southern California

## Network Engineer WiFi (ITS) Job Description

### JOB INFORMATION

Job Code:	167581
Job Title:	Network Engineer WiFi (ITS)
FLSA Status:	Exempt
Supervisory:	
Job Family:	Network Administration
Job Family Group:	Information Technology
Management Level:	7 Individual Contributor

### JOB SUMMARY

Builds and maintains the university's wireless network. Provides network engineering and technical support for wireless network infrastructure, ensuring systems operate at peak efficiency with little to no downtime. Designs, configures, troubleshoots, and maintains university network equipment across multiple platforms. Ensures all networking activities are aligned to industry best practices as well as ITS and university policies, processes, and procedures. Provides technical and training assistance to other ITS teams, as needed. Demonstrates ITS values in action.

### JOB QUALIFICATIONS:

#### Education

Req	Pref	Degree	Field of Study	
X		Bachelor's degree		
	X	Bachelor's degree	Computer Science	Or
	X	Bachelor's degree	Computer Information Systems	Or
	X	Bachelor's degree	in related field(s)	

#### Additional Education

*Check here if experience may substitute for some of the above education.*

X Combined experience/education as substitute for minimum education

#### Work Experience

Req	Pref	Work Experience	Experience Level	
X		2 years		
	X	4 years		

#### Additional Work Experience

*Check here if education may substitute for some of the above work experience.*

Combined experience/education as substitute for minimum work experience

## Knowledge, Skills and Abilities

Req	Pref	Functional Skills
X		Experience managing and documenting wireless networks, overlaying APs onto CAD (or similar) blueprints for heat mapping, and with 802.11a/b/g/n/ac, RF design and WLAN fundamentals.
X		Ability to design, deploy, and troubleshoot large-scale wireless networks, with proven experience in troubleshooting, isolation, and remediation.
X		Experience with wireless optimizations, including AP placement, achieving ideal signal levels, optimized roaming, spectrum selection, channel tuning, cell optimization, QoS, and more.
X		Solid understanding of LAN/WAN and network protocols and wireless monitoring tools for quick issue resolutions.
X		Experience designing controller clustering, failover methods and caveats, group management, AP modes of operation, patching, RF management, similar tasks.
X		Demonstrated discipline recognizing and handling confidential and sensitive information, with proven ability to provide detailed information and summaries to management-level individuals and groups.
X		Experience troubleshooting client experience tests and wireless packet analyses, managing support cases with external technology vendors, and performing active and passive wireless site surveys.
X		Ability to understand and work with large, complex systems, and develop positive working relationships and strong rapport with team members.
	X	Experience in IT, network engineering, and/or wireless networks.
	X	Experience with Aruba Wireless and ClearPass NAC, and knowledge of server and virtual technologies.

## Certifications

Req	Pref	Select Certifications	Enter Additional Certifications
	X		CWNA, ACMA, ACMP, and/or CCNA Wireless certifications, or similar.

## Other Job Factors

## JOB ACCOUNTABILITIES

	% Time	Essential	Marginal	N/A
Works collaboratively with key stakeholders within ITS and other university departments to deliver highly reliable network services. Creates and maintains detailed written documentation, and openly shares experiences and subject-matter expertise with co-workers through written and oral presentations. Provides timely communications to stakeholders, technical staff, and management as required.				
Collaborates with team members to establish project plans, schedules, and priorities. Participates in the development, implementation, and maintenance of policies, procedures, and associated training plans for wireless network administration, operations, and disaster recovery. Creates custom scripts to improve network efficiency and enhance network automation.				
Engages appropriate customers to resolve wireless network issues. Consults with university departments to determine device suitability and capability for campus network connections, in accordance with approved network and security policies.				
Maintains currency with new and emerging technologies and approaches, leveraging the latest industry knowledge to identify opportunities for innovation and continuous improvement. Pursues information on new wireless network engineering developments, reading journals and other pertinent publications, talking with vendors, and participating in professional organizations, meetings, conferences, seminars and training courses.				
Configures, installs, and maintains wireless network devices, performs wireless site surveys, and builds and manages SSIDs for multiple locations. Utilizes monitoring applications and tools to continually improve and troubleshoot the wireless network. Performs on-site verification of implementations to identify or anticipate problems and implement fixes. Functions as staff authority, providing wireless infrastructure and performance expertise. Assists in responding to wireless service issues and problems, collaborating with engineering teams to remediate outages and critical situations (e.g., enterprise IP networking and security, authentication, remote access).				

## JOB ACCOUNTABILITIES

	% Time	Essential	Marginal	N/A
Actively participates in the identification of root causes to network issues, recommending realistic solutions. Analyzes network data and statistics to both proactively and reactively resolve network issues. Collaborates with industry experts and vendors to find and implement effective technology applications. Resolves complex, vendor-specific problems, and submits bug reports to vendors.				
Aids the cultivation of an inclusive environment and a culture of trust and transparency, sharing information broadly, openly, and deliberately. Builds and maintains collaborative relationships with diverse groups of peers, team members, and leadership. Actively embodies ITS values and behaviors (e.g., accountability, ethics, best-in-class customer service).				
Collaborates with team members and management, implementing effective solutions to support the network engineering team's vision. Maintains currency with technology, standards, and best practices. Supports process improvement efforts within the team and across the ITS organization.				

## Other Requirements

<i>Essential:</i>	<i>Emergency Response/Recovery</i>	<i>Essential:</i>	<i>Mandated Reporter</i>
	In the event of an emergency, the employee holding this position is required to "report to duty" in accordance with the university's Emergency Operations Plan and/or the employee's department's emergency response and/or recovery plans. Familiarity with those plans and regular training to implement those plans is required. During or immediately following an emergency, the employee will be notified to assist in the emergency response efforts, and mobilize other staff members if needed.		A mandated reporter who in his or her professional capacity has knowledge of, or reasonably suspects a person who is under the age of 18 years, elderly, or a dependent adult has been the victim of abuse or neglect must report the suspected incident. The reporter must contact a designated agency immediately or as soon as practically possible by telephone or in writing within 36 hours. By virtue of the associated job duties, this position qualifies as a mandated reporter as required by state law and USC's policy at: <a href="https://policy.usc.edu/mandated-reporters/">https://policy.usc.edu/mandated-reporters/</a>
<i>Campus Security Authority (CSA)</i>			<i>Essential:</i>
By virtue of the associated job duties, this position qualifies as a Campus Security Authority as required by law and USC's policy at: <a href="https://dps.usc.edu/alerts/clery/">https://dps.usc.edu/alerts/clery/</a>			No

## ACKNOWLEDGMENTS

The above statements reflect the essential and non-essential functions as necessary to describe the principle contents of the job. They are not intended to be a complete statement of all work requirements or duties that may be required of the position. I understand that I may be asked to perform other duties as assigned. USC reserves the right to add or change duties at any time.

The University of Southern California is an Equal Opportunity Employer. USC prohibits discrimination on any basis protected under federal, state, or local law, regulation, or ordinance or university policies. All employment decisions are based on individual qualifications and business need.

I acknowledge receipt of this job description and its associated physical requirements. I have read and understand the job description and job requirements and agree to abide by their contents. I realize that duties may be requested of me that are not specifically stated herein. I understand that I will be expected to adjust to potential fluctuations in work volume. I understand that, if I have any questions about the essential functions or expectations of my position, my supervisor and/or HR partner are available to discuss them with me.

\_\_\_\_\_  
Print Employee Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Print Manager Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

This job description describes the general nature and level of work required by the position. It is not intended to be an all-inclusive list of qualifications, skills, duties, responsibilities or working conditions of the job. The job description is subject to change with or without notice, and

Management reserves the right to add, modify or remove any qualification or duty. Nothing in this job description changes the existing at-will employment relationship between the university and the employee occupying the position.