

Interview Questions

By Program Area

Technology and Health Division

A NOTE FROM US

These interview questions are by no means intended to serve as a complete guide to questions you can expect in the interview process. While we cannot anticipate any and all questions your employer might inquire on, we have provided these example questions from our industry partners, and from reliable career websites in your industry, to give you the opportunity to practice possible questions. Practice is vital to interview preparation!

TYPES OF INTERVIEW QUESTIONS... AND HOW TO ANSWER THEM

In this guide, types of questions will be provided of the following:

Background - Assess your personal history and relevant life context. Offer a concise summary of your personal, academic, or professional journey that connects to the position.

Behavioral - Focus on how you've handled past situations. Use the STAR method (Situation, Task, Action, Result) to describe how you handled past situations. See the STAR guide on the Career Resources page to assist you.

Educational - Reviews your academic background and achievements. Highlight relevant coursework, projects, or academic achievements that relate to the role.

Goals - Explores your short- and long-term career objectives. Share short- and long-term career goals that align with the position and company mission.

Critical Thinking - Evaluates your problem-solving and reasoning skills. Explain your thought process when solving a problem or making a decision, showing logic and creativity.

Field-Specific - Tests knowledge and skills related to the industry. Demonstrate your technical or subject-area knowledge with relevant examples or experience.

Character - Gauges your values, ethics, and personality traits. Provide honest, values-driven answers that reflect your integrity, work ethic, and interpersonal style.

Experience - Looks at your past job roles and responsibilities. Offer a concise summary of your personal, academic, or professional journey that connects to the position. Describe relevant roles and accomplishments, emphasizing transferable skills and growth.

THE LAWS & INTERVIEW QUESTIONS

Note: The law is subject to change. Always research most up-to-date information, when possible. Updated July 2025.

California Law

- Prohibits questions regarding gender identity and/or expression
- “Ban the Box” law says employers cannot ask about your criminal history until AFTER a conditional offer is made
- California law prohibits employers from asking about salary history

Federal (U.S.) Law

- Prohibits questions about age, marital status, sexual orientation, religion, or ethnicity
- ADA: Employers cannot ask about a candidate’s disability status or medical history prior to a job offer
- It is prohibited for a potential employer to ask about pregnancy plans or childcare arrangements

Employers CAN ask about:

- Relevant qualifications, skills, experience, and education
- A candidate’s ability for work hours and/or willingness to travel
- If you are legally authorized to work in the United States

AERONAUTICS PROGRAMS

Aviation Science

What initially drew you to study aviation science over other technical fields?

Describe a situation where you resolved a conflict within a group project or flight team.

How has your academic training prepared you to understand and apply aerodynamics in real world scenarios?

What do you anticipate the progression of your career in aviation science to look like?

You're assigned to assess a new aviation safety system: how would you approach evaluating its effectiveness?

Can you explain how flight data analytics are used to enhance aviation safety?

How do you handle responsibility when others are relying on your technical expertise?

Have you participated in any internships or hands-on training as part of your aviation science studies? What did you take away?

Commercial Flight

What motivated you to pursue a career as a commercial pilot?

Describe a time during a flight lab or simulator session when you had to respond quickly to a changing situation.

Which ground school subject did you find most rewarding or applicable to your flight practice?

What type of aircraft or airline do you hope to fly for in your career? Why?

You're flying cross-country and encounter deteriorating weather ahead - how would you decide whether to divert?

Can you explain the steps in conducting a proper weight and balance calculation before takeoff?

What does professionalism in the cockpit mean to you, and how do you demonstrate it?

Can you describe your first solo flight experience and what it taught you?

Unmanned Aircraft Systems

What attracted you to unmanned aircraft systems rather than manned aviation?

Tell me about a time you had to troubleshoot a technical issue with a drone during a mission or project.

How has your education helped you understand the regulatory framework for drone operations?

Where do you hope to be in the UAS industry in the next 3–5 years?

If your UAS loses signal during a flight over restricted airspace, what would your next steps be?

What's your process for planning a Part 107-compliant UAS flight mission?

What ethical responsibilities do you believe UAS pilots have in today's evolving airspace?

Have you worked with UAS mapping, surveillance, or data collection tools? Share what you learned from that experience.

AIR CONDITIONING, WELDING, AND REFRIGERATION

Air Conditioning

What led you to pursue a career in air conditioning systems and HVAC technology?

Describe a time you were troubleshooting an HVAC system and had to stay calm under pressure.

Which HVAC course most helped you understand system diagnostics and repair?

What areas of HVAC do you hope to specialize in: residential, commercial, or industrial? Why?

A unit is cooling unevenly across different zones: what steps would you take to diagnose the issue?

What's the difference between a TXV and capillary tube system, and when might you use each?

What values do you bring to customer service interactions when entering someone's home or business?

Can you describe a repair or installation you've completed and what you learned from it?

Refrigeration

What made you interested in pursuing refrigeration technology over general HVAC?

Describe a moment where you had to manage time and prioritize repairs on multiple refrigeration units.

Which refrigeration systems did you find most complex in your coursework, and how did you learn to understand them?

What kind of refrigeration systems are you most interested in working on: grocery stores, cold storage, or transport refrigeration? Why?

A refrigerated display case isn't maintaining temperature: what would be your step-by-step diagnostic approach?

What's the importance of superheat and subcooling in refrigeration system performance?

How do you ensure honesty and integrity when clients don't fully understand technical issues?

What's the most challenging refrigeration job you've done so far and how did you handle it?

Building Automation

What sparked your interest in building automation systems?

Describe a time when a system didn't respond as expected. How did you handle it?

How do control loops work in building automation, and why are they important?

What industries are you most interested in working in for building automation (e.g., hospitals, campuses)? Why?

How would you handle a situation where a building's temperature is inconsistent across floors?

What's the difference between open and proprietary building automation systems?

How do you respond when you're asked to explain a technical concept to someone without a technical background?

What kind of software or platforms have you used in your hands-on training? Why those?

Welding

What drew you to welding as a trade?

Describe how you've handled working in a physically demanding environment.

What welding certifications are you working toward or already earned?

Why did you select those?

What types of welding challenges do you want to gain expertise in next?

How do you decide which welding process is best for a specific job?

What are some common welding defects, and how can they be prevented?

How do you handle repetitive tasks without losing focus?

What materials have you welded on (e.g., stainless steel, aluminum)?

AIRCRAFT MAINTENANCE

Airframe and Aircraft Powerplant Maintenance Technology

What led you to pursue a career in aircraft maintenance?

Describe a situation where you identified a potential safety issue. What did you do?

Can you explain the difference between preventive and corrective aircraft maintenance?

Are there specific aircraft types or aviation sectors (e.g., commercial, private, cargo) you hope to work with?

A part appears to be within limits but is flagged during inspection. What steps would you take?

How do you ensure that all logbook entries and maintenance records meet FAA standards?

What does “integrity” mean to you in the context of aviation maintenance?

Describe a time when you used precision tools (e.g., micrometers, borescopes) in a lab or hands-on setting.

How do you stay focused and detail-oriented during repetitive inspection tasks?

Have you performed or observed a 100-hour or annual inspection? What was your role?

If you receive a vague pilot report, how do you begin diagnosing the problem?

What are your professional goals for the next 3 to 5 years in aviation maintenance?

What are Airworthiness Directives (ADs), and why are they important?

Tell me about a time when you had to follow strict procedures under pressure. How did you ensure accuracy?

Are you drawn more to the mechanical, electrical, or inspection aspects of aircraft systems? And why?

Give an example of when you had to work in a team to complete a complex repair or inspection task. What was your role?

Tell me about a time when you had to admit a mistake or correct your own work. How did you handle it?

What are the main differences between Part 43 and Part 145 in FAA regulations?

How do you interpret aircraft maintenance manuals and service bulletins during inspections or repairs?

You're assigned to inspect a system you're less familiar with: how do you ensure quality and safety?

How would you handle a situation where your team disagrees on the root cause of a mechanical issue?

How do you handle feedback or criticism from senior technicians or inspectors?

How do you prioritize safety, even when others may be rushing to meet deadlines?

What experience do you have working with aircraft electrical systems or troubleshooting avionics?

Have you ever worked on a composite structure repair or dealt with corrosion treatment?

ARCHITECTURE, INDUSTRIAL DESIGN ENGINEERING, MANUFACTURING

Architectural Design Concentration

What inspired you to pursue architectural design as your concentration?

Describe a group project where you had to blend your design ideas with others.

What is the difference between conceptual design and schematic design?

What types of structures or design challenges do you hope to work on in your career?

If a design solution is visually striking but over budget, how would you adapt it?

How do building codes and zoning regulations impact your design process?

How do you stay motivated when you're working through an intensive design revision process?

Have you worked with 3D modeling or physical model-making?

Architectural Technology Concentration

What technical experience or interests led you into this concentration?

Tell me about a project where you had to revise construction documents under time pressure.

What CAD or BIM tools have you used, and what do you use them for?

What areas of architectural technology would you like to grow in (e.g., code compliance, detailing)?

How would you resolve a conflict between design intent and technical feasibility in a plan?

How do you ensure your construction documents are accurate and complete?

How do you respond when others on a project don't understand the technical drawings?

Have you produced a set of working drawings or construction documents?

Construction Management

Have you had any previous exposure to the construction field?

Describe a situation where you had to resolve a conflict between workers or project stakeholders.

How has your coursework helped you understand estimating, planning, or budgeting?

What type of construction projects are you most interested in managing (e.g., residential, commercial, infrastructure)? Why?

How would you handle a project delay due to late material delivery?

How do you apply OSHA safety standards to a construction site plan?

If safety requirements conflict with productivity goals, how do you prioritize?

Have you assisted with or led any team-based construction planning projects?

Engineering and Construction Technology

What interested you in both engineering and construction elements of this field?

Describe a project where you had to bridge engineering concepts with practical construction planning.

What types of surveying or blueprint reading have you learned in class?

What industries are you hoping to work in: public infrastructure, utilities, residential construction? Why?

How would you approach solving a load-bearing issue in a project?

What's the role of construction testing (e.g., concrete, compaction) in your opinion?

What does professionalism mean to you on a construction site?

Have you helped create or revise plans or technical diagrams in a project setting?

Industrial Design Engineering

What interests you in creating or redesigning physical products?

Tell me about a collaborative project where your input helped solve a design problem.

What manufacturing or 3D modeling software have you used in your coursework?

Do you see yourself focusing more on design, prototyping, or engineering? Why?

If a product is beautiful but not cost-effective, how would you revise the design?

What's the role of materials selection in your design process?

How do you receive and incorporate feedback on your designs?

What project best demonstrates your design thinking and problem-solving? Why?

Manufacturing Technology

What interested you in manufacturing as a career field?

Describe a situation where something went wrong on the production floor and how you helped solve it.

What quality control methods have you studied and/or used?

What kind of manufacturing facility would you like to work in (aerospace, automotive, medical, etc.)?

How would you help a team improve workflow and reduce waste?

How do you read and interpret manufacturing blueprints or job orders?

How do you maintain quality and safety during repetitive work?

Have you operated CNC machines, lathes, mills, or other shop equipment in class or work?

COMPUTER NETWORKING TECHNOLOGY

Computer and Networking Technology

What motivated you to pursue computer networking as your field of study?

What areas of networking (e.g., security, infrastructure, cloud) initially interested you the most?

How has your background outside of tech influenced the way you approach technical challenges?

What certifications have you studied for or earned as part of your coursework (e.g., CompTIA Network+, CCNA) and how have they benefitted your education?

How have your lab experiences helped you understand real-world network environments?

What networking protocols have you learned, and how do they differ in purpose (e.g., TCP vs UDP)?

Tell me about a time when you had to troubleshoot a difficult network issue under pressure?

Describe a group project where you had to collaborate to set up or simulate a network.

What type of networking career are you pursuing: cybersecurity, systems admin, cloud networking, or something else? Why that area?

What kind of company or work environment do you see yourself in: small business IT, enterprise, government, etc.? Why?

Where would you like to be professionally in 3–5 years?

How would you troubleshoot an intermittent network outage that doesn't leave an obvious error log?

You discover a misconfiguration caused downtime, but your team disagrees on who should fix it. What do you do?

How would you secure a small office network with limited resources and outdated hardware?

If a user reports a "slow internet" issue, what are the first things you would check?

Can you explain what subnetting is and why it's important in IP addressing?

How do VLANs improve performance and security in a network?

How do you stay patient and professional when dealing with people who aren't tech-savvy?

How do you handle mistakes: especially if they cause downtime or network disruption?

What keeps you motivated when you're troubleshooting long or complex networking issues?

How do you make sure you're continuously learning in a fast-changing tech industry?

Have you set up or configured an actual network (home, lab, or internship)? What did it include?

What operating systems or platforms (e.g., Windows Server, Linux) have you worked with in a networking context?

Describe any hands-on experience you have with network monitoring tools or diagnostic software.

ELECTRONICS

Electronics and Computer Engineering Technology

What aspects of this program stood out to you when choosing your major?

Share an experience where you had to present technical material to a non-technical audience.

Describe a group project where you worked on both the hardware and software aspects of a system.

What programming languages have you used in your coursework (e.g., C, Python, assembly)?

Are you aiming to work more in embedded systems, robotics, hardware design, or another area? Why that area?

What type of company or industry do you hope to work in (e.g., automotive, aerospace, medical devices)?

Where do you see your career in five years, and how does this role support that trajectory?

A team member wants to use a different method of fix than you had planned. How would you evaluate the tradeoffs of each of your method approaches?

What's the role of buses and registers in embedded system design?

What does responsibility mean to you when working on systems that could affect public safety or reliability?

Have you integrated hardware and software in any team-based projects?

Electronics Engineering Technology

How did you decide between this and other engineering-related programs?

What drew you to electronics engineering as a technical field?

Describe a situation where a team project didn't go as planned. What did you learn?

What kinds of instrumentation and lab equipment have you used (e.g., oscilloscopes, multimeters, signal generators) in your coursework?

Are you more interested in product testing, design, maintenance, or quality control? Why?

What steps would you take if a client asked for a feature that might compromise safety?

How do filtering circuits work, and when would you use one?

What do you do when you feel stuck on a technical problem?

What role does ethics play in electronics and engineering technology?

Have you participated in any industry internships, design competitions, or job-shadowing in the field? If so, what main takeaways did you have from those experiences?

MENTAL HEALTH

Addiction Counseling

What inspired you to pursue a career in addiction counseling?

What populations or settings are you most passionate about working with? Why?

Describe a situation where you had to remain calm during a client's crisis.

Share an experience when you had to enforce a boundary with a client.

What counseling theories or modalities are you trained in (e.g., CBT, motivational interviewing)?

What about that modality makes you feel passionate about its use in Addiction Counseling treatment?

Can you explain the difference between physical dependence and psychological addiction and how each would present in client treatment?

What legal and ethical considerations have you studied that relate specifically to addiction counseling?

What kind of addiction counseling setting do you hope to work in (e.g., inpatient, outpatient, recovery homes)? Why that setting?

How do you envision making a long-term impact in the field of addiction recovery?

If you had to choose between following agency policy and what you believe is best for the client, how would you proceed?

What's your understanding of harm reduction, and how do you feel about using it in your work?

How do you stay centered and emotionally regulated when clients disclose difficult or triggering content?

Describe a time when you had to write a clinical note or assessment: what did you focus on?

Psychiatric Technician

Why did you choose to work as a psych tech rather than another mental health role?

Tell me about a time you helped de-escalate a patient in crisis.

What have you learned about psychotropic medications and your role in administering them?

What patient populations are you most interested in working with (e.g., adolescents, geriatrics, dual diagnosis)? Why that population?

How would you handle a patient making inappropriate comments or violating your personal boundaries?

How do you monitor for medication side effects or psychiatric deterioration?

What does professionalism mean to you in high-stress behavioral health settings?

Have you worked in a behavioral health facility, hospital, or residential program? What did you learn?

Psychiatric Technician to RN Please see “Nursing” on the next page

Nursing (ADN)

What inspired your decision to become a nurse, and why now?

Can you describe a scenario where you had to adjust quickly to changes in patient care?

What exposure do you have with electronic health records or simulation labs?

What type of clinical setting do you hope to begin working in and why?

What are your short-term and long-term goals as a nurse?

How would you prioritize care for three patients with competing needs?

If a patient’s lab results are abnormal but there’s no provider order, how do you handle it?

How do you ensure safe handoffs during shift report?

How do you perform a comprehensive head-to-toe assessment on a medical-surgical patient?

How would your classmates or instructors describe your strengths as a future nurse?

How do you handle constructive criticism and feedback from instructors or nurses?

What types of patients did you work with most during clinicals (e.g., med-surg, long-term care, OB, peds)?

Have you had any experience starting IVs, administering meds, or performing wound care?

Did you complete a preceptorship, capstone, or leadership rotation? What was your role?

(LVN to RN or Psychiatric Technician to RN) Registered Nurse

How has your background outside of nursing influenced your approach to patient care?

Tell me about a time when you had to advocate for a patient’s needs.

What patient education strategies have you used from your education, during your training?

What are your long-term goals in the healthcare industry?

How would you handle receiving an unclear or unsafe provider order?

What protocols do you follow when performing wound care or administering IV meds?

How do you maintain compassion when working long, emotionally intense shifts?

Have you ever worked with a preceptor or in a capstone clinical placement? What did you learn?

PUBLIC SAFETY

Administration of Justice

How has your background influenced your views on justice and public service?

Describe a situation where you had to enforce rules you personally disagreed with.

What constitutional rights have you studied in relation to arrest and search procedures?

What's your long-term career goal in the justice system?

How would you determine whether to issue a citation or warning in a gray-area case?

How do officers build trust in high-crime or historically underserved communities?

How do you ensure fairness and objectivity when enforcing laws?

What simulated law enforcement activities have you done in your program?

Emergency Medical Services (EMS)

Why did you choose EMS over other medical or fire professions?

Tell me about a time when you had to make a quick decision under pressure.

What life-saving procedures have you been trained to perform (e.g., CPR, airway management)?

What setting are you most interested in: ambulance service, hospital transport, disaster response? Why?

What do you do if you arrive on scene and your patient refuses care?

What are the ABCs of emergency care?

How do you stay calm and compassionate with distressed or grieving families?

Have you completed ambulance ride-alongs or real patient assessments? What was your experience?

Fire Technology

What parts of the job (physical, mental, technical) do you feel drawn to? Why?

Describe a situation in training when you had to overcome fear or uncertainty.

What have you learned about fire behavior and fire control strategies?

Where do you see your fire career in 5–10 years?

You arrive to find heavy smoke but no visible flames: what's your first step?

What are some common causes of firefighter injury and how do you avoid them?

What does accountability mean on the fireground?

Have you completed drills or scenarios with live fire, ladders, or hose deployment? What was your role?

Wildland Fire Technology

What inspired you to work in wildland firefighting specifically?

Share a time when you had to adapt quickly to rapidly changing conditions.

How has map reading, GPS, or compass training prepared you for the field?

Are you pursuing federal, state, or private sector wildland fire roles? Why?

What are the different types of wildland fire engines and aircraft used in suppression?

How do you maintain resilience during long shifts in extreme terrain?

Have you completed wildland drills, pack tests, or field deployments? What was your experience?

A fire shifts direction due to wind: what is your next move as part of the crew?

Radiologic Technology

What inspired you to pursue a career in radiologic technology?

Why did you choose this field over other healthcare pathways (e.g., nursing, respiratory therapy)?

Tell me about a time when you had to remain calm and professional during a stressful patient interaction.

Describe a situation where you had to manage competing demands in a busy clinical setting.

Have you ever had to advocate for a patient's comfort or safety in a difficult situation?

What imaging modalities have you been trained in during your program, and which ones are you most confident using?

What safety procedures did you learn in your program, regarding radiation protection for both patient and technologist?

How has your educational experience prepared you for working as part of a fast-paced imaging team?

What steps do you take before, during, and after an exam to ensure proper imaging technique?

What type of radiology setting do you want to work in: hospital, outpatient, trauma center, etc.? Why?

What are your long-term career goals in the field of radiology?

If a patient cannot follow positioning instructions due to pain or immobility, how do you adapt?

You notice a possible fracture or abnormality not mentioned in the order: what do you do?

How would you respond if the ordering physician requested an image that seemed unnecessary or unclear?

What's the difference in positioning and technique between imaging the cervical spine and lumbar spine?

What are some key considerations when imaging post-operative or ICU patients?

How do you maintain compassion and professionalism during long or emotionally draining shifts?

What do you believe is the most important quality in a radiologic technologist?

What types of exams have you performed most frequently during clinicals?

Have you assisted in portable or OR imaging procedures? What was your role?

Have you worked with pediatric, geriatric, or trauma patients? What challenges did you face?