Cisco Certified Architect Exam Topics *(blueprint)*
The following topics will be assessed during the exam process.

Exam Sections and Sub-task Objectives	√
1. Gather, clarify, and analyze requirements	
a. Gather, clarify, and analyze business requirements	
i. Recognize critical requirements (stated and implied)	
ii. Recognize noncritical requirements (stated and implied)	
iii. Identify and gather missing information	
iv. Identify and clarify ambiguous information	
v. Identify and resolve conflicting information and requirements	
vi. Demonstrate knowledge of the business	
vii. Decompose requirements and problems into component parts	
viii. Recognize and/or clarify CAPEX parameters (e.g., equipment costs, capital software costs, capital facility expenditures)	
ix. Recognize and/or clarify OPEX parameters (e.g., software tooling changes, leases, retraining, staffing, support contracts, utilities, licensing and hosting)	
x. Recognize, challenge, and resolve unrealistic requirements (e.g., common-case vs. worst-case scenario)	
b. Gather, clarify, and analyze technical requirements	
i. Recognize critical requirements (stated and implied)	
ii. Recognize noncritical requirements (stated and implied)	
iii. Identify and gather missing information	
iv. Identify and clarify ambiguous information	
v. Identify and resolve conflicting information and requirements	
vi. Leverage existing network documentation to gain understanding of the current network and how it supports the business	
vii. Decompose requirements and problems into component parts	
viii. Recognize, challenge, and resolve unrealistic requirements (e.g., common-case vs. worst-case scenario)	
c. Align business and technical goals and direction	
i. Map technical solution to business impact	
ii. Map business needs and requirements to technology	
iii. Recognize the relationship between technical and business requirements	
iv. Map business continuity requirements to the network architecture	
v. Establish a vision and strategy for the network with clarity and completeness	
vi. Analyze and estimate various impacts on the network from a change in business structure or process	

vii.	Analyze and estimate the SLAs required by the business and evaluate the impact of outages	
viii.	Recognize, challenge, and resolve unrealistic requirements (e.g., common-case vs. worst-case scenario)	
d.	**Perform cursory rough estimations for new or changing requirements and/or informal what-ifs and requests**	
i.	Recognize the impact on the existing network and how it currently supports the business	
ii.	Estimate the general implementation cost and time frame	
iii.	Estimate project feasibility and practicality (including assumptions of parameters and constraints that impact the two)	
iv.	Provide an opinion of how the request does or does not align with network and business goals (both current and future)	
v.	Recognize and/or clarify CAPEX parameters (e.g., equipment costs, capital software costs, capital facility expenditures)	
vi.	Recognize and/or clarify OPEX parameters (e.g., software tooling changes, leases, retraining, staffing, support contracts, utilities, licensing and hosting)	
2.	**Develop a functional specification for the network**	
a.	**Devise a solution**	
i.	The complexity of the network is appropriate for the business requirements	
ii.	The survivability of the network is appropriate for the business requirements	
iii.	The scalability of the network is appropriate for the business requirements	
iv.	The manageability of the network is appropriate for the business requirements	
v.	The security of the network is appropriate for the business requirements	
vi.	The performance of the network is appropriate for the business requirements	
vii.	The cost of the network is appropriate for the business requirements	
b.	**Perform risk analysis**	
i.	Technologies	
ii.	Security	
iii.	Legal	
iv.	Dependencies (e.g., outsourcing to third parties, training, tools, provisioning)	
3.	**Create a road map**	
a.	**Create a migration and transition strategy**	
i.	Account for long-term requirements	
ii.	Perform and account for risk analysis	
iii.	Minimize the negative impact on existing services	
iv.	Identify parties responsible for design, implementation, and operation tasks	
v.	Strive for ease of implementation	

4.	Convey decisions and rationale (written and verbal)	
a.	**Communicate to a business audience**	
i.	Articulate business problems, requirements, and constraints	
ii.	Articulate technical problems, requirements, interdependencies, and constraints	
iii.	Communicate the business strategy and direction	
iv.	Communicate the risks and benefits	
v.	Communicate with specificity rather than generality (e.g., "does not scale because…" rather than simply "does not scale")	
vi.	Communicate the rationale for decisions clearly and confidently	
vii.	Accept, think about, and respond to changing requirements, criticisms, questions, and challenges in a timely and positive (not arrogant or defensive) manner	
viii.	Influence others	
b.	**Communicate to a technical audience**	
i.	Articulate business problems, requirements, and constraints	
ii.	Articulate technical problems, requirements, interdependencies, and constraints	
iii.	Communicate business strategy and direction	
iv.	Communicate risks and benefits	
v.	Communicate with specificity rather than generality (e.g., "does not scale because…" rather than simply "does not scale")	
vi.	Communicate the rationale for decisions clearly and confidently	
vii.	Accept, think about, and respond to changing requirements, criticisms, questions, and challenges in a timely and positive (not defensive) manner	
viii.	Influence others	
5.	**Demonstrate technical expertise**	
a.	**Technical expertise**	
i.	Demonstrate conceptual knowledge of a wide array of network technologies (e.g., Layer 3 routing, tunneling, security, network management)	
ii.	Demonstrate conceptual knowledge of places in the network (e.g., data center, WAN, campus)	
iii.	Demonstrate conceptual knowledge of a wide array of applications on the network (e.g., voice, video)	
iv.	Demonstrate conceptual knowledge of interactions between components and technologies	
v.	Demonstrate knowledge of current and future directions of technologies, places in the network, and applications	
vi.	Demonstrate detailed knowledge of a range of network technologies applicable to infrastructure design (e.g., Layer 3 routing, tunneling, security, network management)	