

Homework 1

Research available classes and degree granting programs in the field of System Administration. Compare their contents to those of industry standard certification courses.

A system administration academic program typically begins at the associate's or bachelor's level with basic degrees such as an information technology degree or a computer science degree. These include but are not limited to a variety of core courses on essentially everything regarding IT basics, see for example: network fundamentals course, OS (Operating Systems) class database management lecture This will make sure that the students have an understanding of common IT concepts after they graduate from their 2–years Associate's degree program . A bachelor's degree program however, covers broader and complex subjects like - advanced networking, servers administration, cloud computing or IT project management. These unique blend of theoretical information and functional abilities makes the degree suitable for tasks in intricate IT management as well as network managing (National Center for Education Statistics, 2023).

This deliberate focus is set the skills and technologies needed to become a junior-to-intermediate systems administrator in industry. For example, entry level to intermediate jobs require CompTIA A+, Network and Security certifications. Take CompTIA A+ The Network and Security certificates go even more in-depth into network management techniques as well as security strategies to provide particular proficiency for perhaps streamers of the given responsibility.

Some of the areas which belong to specialized certification include Cisco Certified Network Associate (CCNA), and Microsoft Certified: Azure Administrator Associate. Azure Administrator Associate certification focuses on configuring Azure Services and Managing Cloud Resources, which goes with latest cloud computing trends (Microsoft, 2024). On the other hand, CCNA program provides training to able professional work with Cisco networking equipment and protocols by touching network fundamentals, IP connection readying. Security (Cisco, 2024)

System administration and related topics covered in the context of academic degrees give a great general background, while industry certifications make sure you get what has to be done under your belt along with ensuring that they prepare candidates for up-to-date technologies needed by perspective employees. It often boils down to personal job motivations with regards in between those alternatives; Certificates help you get the knowledge and Academic degrees give you a complete education.

American Association of Community Colleges. 2021. *Associate's Degrees*. Retrieved from <https://www.aacc.nche.edu/>

National Center for Education Statistics. 2023. *Bachelor's Degrees*. Retrieved from <https://nces.ed.gov/>

CompTIA. 2024. *CompTIA A+ Certification*. Retrieved from <https://www.comptia.org/>

Microsoft. 2024. *Microsoft Certified: Azure Administrator Associate*. Retrieved from <https://learn.microsoft.com/>

Cisco. 2024. *Cisco Certified Network Associate (CCNA)*. Retrieved from <https://www.cisco.com/>