SOFTWARE-DEFINED NETWORKING CERTIFICATE

Program Description

In today's networking environment, where networks are ubiquitous and many boxes provide various types of network functionality, software-defined networking (SDN) frees network architecture from constraints and expands opportunities for customization. With SDN, network admins can separate the control plane from the data plane, opening doors to new innovation across industries.

In this certificate program, you will develop practical skills in SDN. By learning foundational concepts, you will be able to build your first SDN in a hands-on programming environment. You will also get practical experience optimizing the flow of data using SDN. Finally, you will explore how you can use SDN to monitor a network and utilize middle boxes to scale a network up and out. With the deeper control of SDN, you can improve your network's packet throughput, uptime, and overall efficiency, making crucial strides for your team. By the end of this program, you will be able to verify network properties with SDN and expand opportunities for your work as well as your career.

Key Takeaways

- Differentiate between traditional distributed networks and centralized SDN approaches to network architecture
- Identify how network paths affect performance
- Implement optimal traffic engineering with SDN
- Detect changes in network conditions and implement data-monitoring and collection techniques
- Customize routing to integrate network functions
- Verify SDNs using static and dynamic techniques

What You'll Earn

- Software-Defined Networking Certificate from Cornell Bowers College of Computing and Information Science
- 80 Professional Development Hours (8 CEUs)

Who Should Enroll

- Network administrators and architects
- Network engineers and operators
- Aspiring SDN engineers
- Enterprise network system installers
- System administrators and integrators
- Solutions designers
- DevOps teams
- NFV technologists

Total Investment

2.5 months to complete all the courses

How to Enroll

For more information on how to enroll, please visit Software-Defined Networking Certificate

The courses in this certificate program are required to be completed in the order that they appear.

Courses

Code	Title	Hours
eCornell CIS581	Building Your First Software-Defined Network	0
eCornell CIS582	Optimizing the Flow of Data Through Your Network Using SDN	0
eCornell CIS583	Getting Visibility Into Network Conditions Using SDN	0
eCornell CIS584	Enhancing Your SDN With Special Boxes	0
eCornell CIS585	Verifying Network Properties With SDN	0