

ASM Educational Center (ASM)



ASM One-Week Summer IT Camp Syllabus (Ages 15–18)

Day 1 (Monday): Networking Basics

- - What is IT? Overview of Networking, Security, and Cloud
- Introduction to Computer Networks
- OSI Model (Overview)
- - IP Addressing, DNS, and Network Devices
- Activity: Build a simple LAN using simulation tools (Packet Tracer)

Day 2 (Tuesday): Networking in Action

- - LAN vs. WAN
- - Switching & Routing Basics
- - Wireless Networking & Network Security
- - Troubleshooting Common Network Issues
- Lab: Assign IPs, connect devices, simulate data transfer

Day 3 (Wednesday): Cybersecurity Essentials

- · What is Cybersecurity & Why It Matters
- Types of Cyber Threats: Malware, Phishing, Ransomware
- - Activity: Securing Wireless network

Day 4 (Thursday): Intro to Amazon AWS Cloud

- AWS Overview (EC2, S3, IAM)
- AWS Console Walkthrough (Free Tier Setup if possible)
- Lab: Create an S3 bucket & upload a file
- - Understanding IAM roles & permissions

Day 5 (Friday): Bringing It All Together

- Recap: Networking, Security, AWS
- Career Pathways in IT (Networking, Security, Cloud)
- Final Project: Students team up to present a basic IT system using all three concepts
- Creating a Websites Via Amazon AWS Webserver (Hands-on)