MINNESOTA TECH FOR SUCCESS

Week 1 & 2:
Introduction to IT

10/9/2024

Agenda

- **Announcements**
- **Classroom (1 – 1:30pm)**
  - Introduction to IT
  - Introduction: Chad
  - Rules & Expectations
  - Assignment (if applicable)

- **Break (5 min)**

- **Classroom (1:35 – 2:30pm)**
  - HTML/CSS: Esther

- **Break (5 min)**

- **Warehouse (2:35 – 3:30pm)**
  - Intro to intake

ANNOUNCEMENTS

Announcements for 10/9

- **Next Session:** Wednesday, 10/23
  - No Session on Wednesday, 10/16 – Teacher PD Day

- ITE & ITD Program
- Media Release forms

- Assignments
  - Life & Technology
  - Check website for updates & directions

INTRODUCTION

To Chad

Expectations - Values

- **Values**
  - **R**espect
  - **A**ccountability
  - **I**mprovement
  - **S**teadfast
  - **E**ncouragement

- **Classroom & Warehouse**
  - Food & beverages
  - Recycle when possible

Expectations - Attendance

- **If you will be late or miss a session:**
  - **Please send a combined email to –** Chad, Tammy
    - **Include:** <u>Reason</u> & when you expect to be on site

- **MTFS**
  - Tracks attendance and work hours
  - Sends list to Great River School

Expectations – Check In & Out; Assignments

- **Checking In**
  1. Sign in at the front
  2. Obtain and wear a lanyard – must always be on

- **Checking Out**
  1. Clean workstations
  2. Put away laptop and equipment
  3. Sign out at the front
  4. Return lanyard

- **Assignments** – Due by start of CAS session Wednesday 1pm CT

Our Websites

- **MTFS Website - https://techforsuccess.org**

- **MTFS-CAS Student Website – https://mntechlearn.org**

INTRODUCTION TO IT

Information Technology

- **Information technology** (IT) - the use of systems, computers, and other devices to create, process, store, send, and retrieve electronic data for various purposes
- **Also includes:** programming languages, software, data & information processing

Information technology components and functions

Information Technology - Certifications

- AWS Certified Solutions Architect – Associate
- Certified Data Privacy Solutions Engineer (CDPSE)
- Certified Cloud Security Professional (CCSP)
- Certified Data Professional (CDP)
- Certified Ethical Hacker (CEH)
- Certified Information Security Manager (CISM)
- Certified Information Systems Auditor (CISA)

- Certified ScrumMaster (CSM)
- Cisco Certified Network Professional (CCNP)
- CompTIA certifications
- Google Professional Cloud Architect
- GIAC Security Essentials
- ITIL 4 Foundation Level Certification
- Project Management Professional (PMP)
- VMware Certified Professional
- Certified Information Systems Security Professional (CISSP)
- Certified in Risk and Information Systems Control (CRISC)

Information Technology – Jobs & Salaries

- **Google Cloud** – Professional Cloud Architect ($200K)

- **PMP**: Project Management Professional ($176k)

- **AWS** Certified Solutions Architect – Professional ($175K)

- **CISM** – Certified Information Security Manager ($165K)

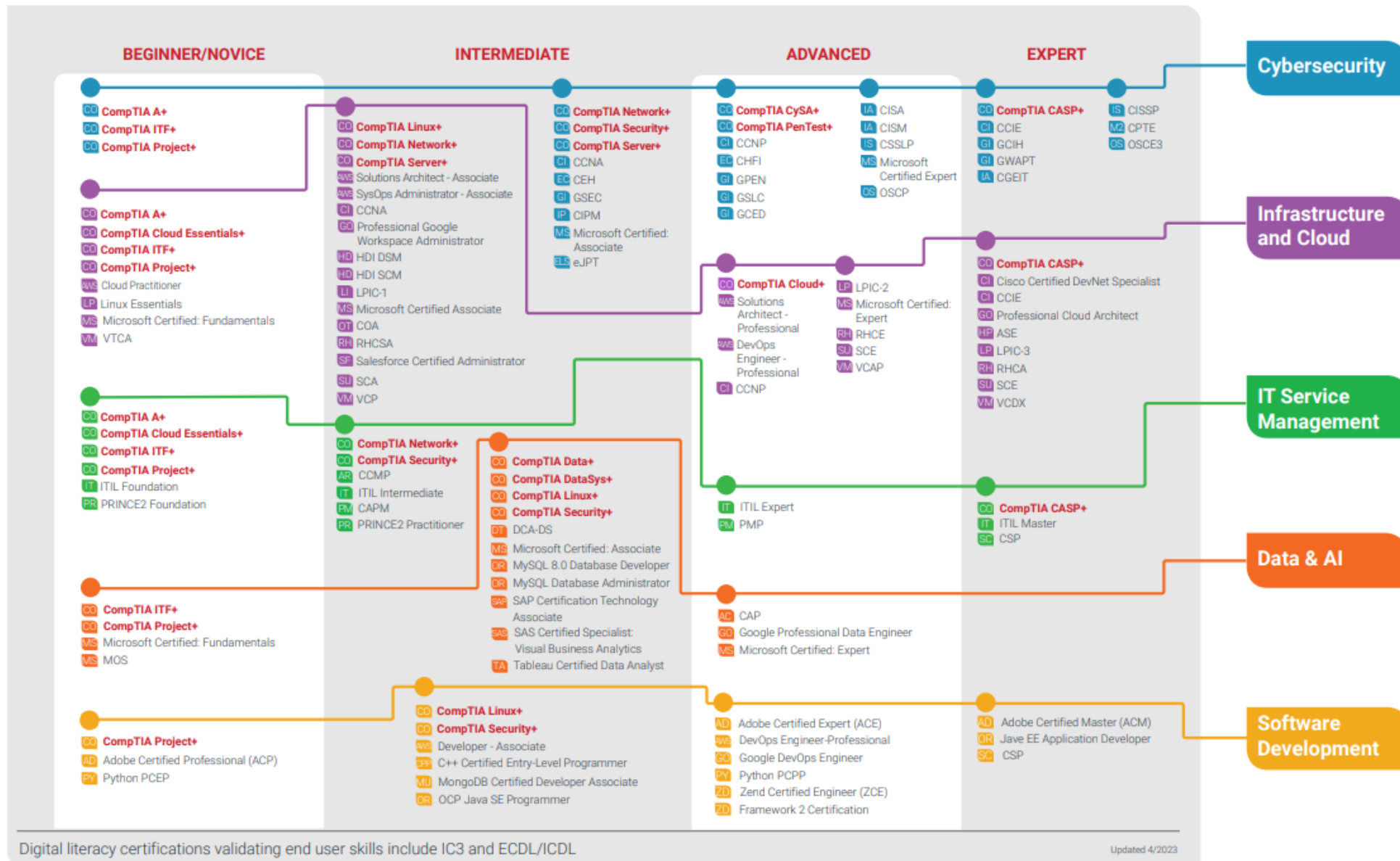- **CISSP** - Certified Information Systems Security Professional ($155K)

IT Certification Roadmap

Explore the possibilities with the CompTIA Interactive IT Roadmap at:
CompTIA.org/CertsRoadmap

CompTIA

Certifications validate expertise in your chosen career.

BEGINNER/NOVICE	INTERMEDIATE	ADVANCED	EXPERT

Cybersecurity

BEGINNER/NOVICE
- **CompTIA A+**
- **CompTIA ITF+**
- **CompTIA Project+**

INTERMEDIATE
- **CompTIA Network+**
- **CompTIA Security+**
- **CompTIA Server+**
- CCNA
- CEH
- GSEC
- CIPM
- Microsoft Certified: Associate
- eJPT

ADVANCED
- **CompTIA CySA+**
- **CompTIA PenTest+**
- CCNP
- CHFI
- GPEN
- GSLC
- GCED
- CISA
- CISM
- CSSLP
- Microsoft Certified Expert
- OSCP

EXPERT
- **CompTIA CASP+**
- CCIE
- GCIH
- GWAPT
- CGEIT
- CISSP
- CPTE
- OSCE3

Infrastructure and Cloud

BEGINNER/NOVICE
- **CompTIA A+**
- **CompTIA Cloud Essentials+**
- **CompTIA ITF+**
- **CompTIA Project+**
- Cloud Practitioner
- Linux Essentials
- Microsoft Certified: Fundamentals
- VTCA

INTERMEDIATE
- **CompTIA Linux+**
- **CompTIA Network+**
- **CompTIA Server+**
- Solutions Architect - Associate
- SysOps Administrator - Associate
- CCNA
- Professional Google Workspace Administrator
- HDI DSM
- HDI SCM
- LPIC-1
- Microsoft Certified Associate
- COA
- RHCSA
- Salesforce Certified Administrator
- SCA
- VCP

ADVANCED
- **CompTIA Cloud+**
- Solutions Architect - Professional
- DevOps Engineer - Professional
- CCNP
- LPIC-2
- Microsoft Certified: Expert
- RHCE
- SCE
- VCAP

EXPERT
- **CompTIA CASP+**
- Cisco Certified DevNet Specialist
- CCIE
- Professional Cloud Architect
- ASE
- LPIC-3
- RHCA
- SCE
- VCDX

IT Service Management

BEGINNER/NOVICE
- **CompTIA A+**
- **CompTIA Cloud Essentials+**
- **CompTIA ITF+**
- **CompTIA Project+**
- ITIL Foundation
- PRINCE2 Foundation

INTERMEDIATE
- **CompTIA Network+**
- **CompTIA Security+**
- CCMP
- ITIL Intermediate
- CAPM
- PRINCE2 Practitioner

ADVANCED
- ITIL Expert
- PMP

EXPERT
- **CompTIA CASP+**
- ITIL Master
- CSP

Data & AI

BEGINNER/NOVICE
- **CompTIA ITF+**
- **CompTIA Project+**
- Microsoft Certified: Fundamentals
- MOS

INTERMEDIATE
- **CompTIA Data+**
- **CompTIA DataSys+**
- **CompTIA Linux+**
- **CompTIA Security+**
- DCA-DS
- Microsoft Certified: Associate
- MySQL 8.0 Database Developer
- MySQL Database Administrator
- SAP Certification Technology Associate
- SAS Certified Specialist: Visual Business Analytics
- Tableau Certified Data Analyst

ADVANCED
- CAP
- Google Professional Data Engineer
- Microsoft Certified: Expert

Software Development

BEGINNER/NOVICE
- **CompTIA Project+**
- Adobe Certified Professional (ACP)
- Python PCEP

INTERMEDIATE
- **CompTIA Linux+**
- **CompTIA Security+**
- Developer - Associate
- C++ Certified Entry-Level Programmer
- MongoDB Certified Developer Associate
- OCP Java SE Programmer

ADVANCED
- Adobe Certified Expert (ACE)
- DevOps Engineer-Professional
- Google DevOps Engineer
- Python PCPP
- Zend Certified Engineer (ZCE)
- Framework 2 Certification

EXPERT
- Adobe Certified Master (ACM)
- Java EE Application Developer
- CSP

Digital literacy certifications validating end user skills include IC3 and ECDL/ICDL.

Updated 4/2023

Microsoft provides three certification paths. Please visit Microsoft's webpage for a full list of their offerings: https://bit.ly/3tJYm8Z

Troubleshooting Methodology

1. Identify the problem

- Gather information from the user, identify user changes, and, if applicable, perform backups before making changes
- Inquire regarding environmental or infrastructure changes

2. Establish a theory of probable cause

- If necessary, conduct external or internal research based on symptoms

3. Test the theory to determine the cause

- Once the theory is confirmed, determine the next steps to resolve the problem
- If the theory is not confirmed, re-establish a new theory or escalate

4. Establish a plan of action to resolve the problem and implement the solution

- Refer to the vendor's instruction for guidance

5. Verify full system functionality and, if applicable, implement preventive measures

6. Document the findings, actions, and outcomes

CompTIA.

BREAK

5 minutes