SYLLABUS
PART I
EDISON STATE COMMUNITY COLLEGE
CIS 111S IT FUNDAMENTALS
3 CREDIT HOURS

COURSE DESCRIPTION
Introduces foundational Information Technology concepts and practical skills. Students will explore core computing concepts, hardware, operating systems, networking, software applications, data management, cybersecurity fundamentals, and basic programming concepts. Emphasis is placed on understanding how technology is used in personal, academic, and professional environments while developing essential digital literacy and problem-solving skills. Hands-on labs reinforce real-world applications of IT concepts. The course aligns with the CompTIA IT Fundamentals (ITF+) / CompTIA Tech+ certification objectives. A discounted certification exam voucher may be available upon successful completion of the course.

COURSE GOALS
The student will:

Bloom's Level			Program Outcomes
2	1.	Explain fundamental information technology concepts, terminology, and computing principles.	4, 5
2	2.	Describe the purpose and function of common computing devices, hardware components, and peripherals.	4, 8
2	3.	Explain basic networking concepts, including wired and wireless connectivity and internet technologies.	6, 8
3	4.	Use common software applications, including operating systems, productivity tools, and web-based applications.	4, 7
2	5.	Describe foundational software development concepts, including logic, data types, and programming structures.	4, 5
2	6.	Use basic information security principles, privacy considerations, and cybersecurity best practices.	5, 8
2	7.	Explain database concepts and the role of data storage, organization, and retrieval in modern systems.	4, 8
3	8.	Apply basic troubleshooting methodologies to identify and resolve common technology issues.	3, 8
2	9.	Explain emerging technologies and trends, including cloud computing, automation, and artificial intelligence.	5, 8

CORE VALUES
The Core Values are a set of principles that guide in creating educational programs and environments at Edison State. They include communication, ethics, critical thinking, human diversity, inquiry/respect for learning, and interpersonal skills/teamwork. The goals, objectives, and activities in this course will introduce/reinforce these Core Values whenever appropriate.

TOPIC OUTLINE
1. Introduction to Information Technology Concepts and Terminology
2. Digital Citizenship and Professional Use of Technology
3. Computing Devices and Hardware Components

4. Data, Privacy, and Information Management
5. Internet Technologies and Web Browsers
6. Basic Cybersecurity Concepts and Threat Awareness
7. Networking Fundamentals (Wired and Wireless)
8. Operating System Concepts and File Management
9. Applications and Productivity Software
10. Database Fundamentals and Data Structures
11. Introduction to Programming and Logical Thinking
12. Troubleshooting Methodologies and Problem Solving
13. Virtualization and Cloud Computing Basics
14. Emerging Technologies and the Future of IT
15. CompTIA ITF+ / Tech+ Certification Exam