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# ONLINE LECTURE SERIES Technical/Software Support Staff

#### Component 4: Introduction to Information and Computer Science

Unit No.	Unit Title	Lectures
1	Basic Computing Concepts, Including History	<u>1A, 1B, 1C, 1D, 1E</u>
2	Internet and the World Wide Web	<u>2A</u> , <u>2B</u> , <u>2C</u> , <u>2D</u>
3	Computer Hardware	<u>3A</u> , <u>3B</u> , <u>3C</u>
4	Computer Software	<u>4A</u> , <u>4B</u> , <u>4C</u>
5	Computer Programming	<u>5A</u> , <u>5B</u> , <u>5C</u> , <u>5D</u> , <u>5E</u>
6	Databases and SQL	<u>6A</u> , <u>6B</u> , <u>6C</u> , <u>6D</u>
7	Networks	<u>7A, 7B, 7C, 7D, 7E</u>
8	Security	<u>8A</u> , <u>8B</u> , <u>8C</u>
9	Information Systems	<u>9A</u> , <u>9B</u> , <u>9C</u> , <u>9D</u>
10	Future of Computing	<u>10A</u> , <u>10B</u>

#### Component 7: Working with HealthIT Systems

Unit No.	Unit Title	Lectures
1	Introduction & Overview: Components of HIT Systems	<u>1A</u>
2	Under the Hood	<u>2A</u> , <u>2B</u>
3	Understanding Information Exchange in HIT Systems	<u>3A</u>
4	The Effective IT System	<u>4A</u>
5	Fundamentals of Usability in HIT Systems—What Does It	<u>5A</u> , <u>5B</u>
	Matter?	
6	HIT Facilitated Error—Cause and Effect	<u>6A</u> , <u>6B</u>
7	Protecting Privacy, Security, and Confidentiality in HIT	<u>7A</u> , <u>7B</u>
	Systems	
8	HIT System Planning, Acquisition, Installation, &Training:	<u>8A</u> , <u>8B</u>
	Practices to Support & Pitfalls to Avoid	
9	Potential Issues with Adoption and Installation of an HIT	<u>9A</u>
	system	
10	HIT and Aspects of Patient-Centered Care	<u>10A, 10B</u>
11	Health IT in the Future	<u>11A, 11B</u>

#### Component 8: Installation and Maintenance of Health IT Systems

Unit No.	Unit Title	Lectures
1	Elements of a Typical EHR System	<u>1A, 1B</u>

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2	System Selection – Software and Certification	<u>2A</u>
3	System Selection – Functional and Technical Requirements	<u>3A</u>
4	Structured Systems Analysis and Design	<u>4A</u>
5	Software Development Life Cycle	<u>5A</u>
6	System Security Procedures and Standards	<u>6A</u> , <u>6B</u>
7	System Interfaces and Integration	<u>7A</u>
8	Troubleshooting, Maintenance and Upgrades, and Interaction	<u>8A</u> , <u>8B</u>
	with Vendors, Developers, and Users	
9	Creating Fault Tolerant Systems, Backups, and	<u>9A</u> , <u>9B</u> , <u>9C</u>
	Decommissioning	
10	Developing a Test Strategy and a Test Plan	<u>10A</u>
11	Pilot Testing and Full-Scale Deployment	<u>11A</u>

#### Component 9: Networking and Health Information Exchange

Unit No.	Unit Title	Lectures
1	ISO Open Systems Interconnection (OSI)	<u>1A</u> , <u>1B</u>
2	Network Media and Hardware Communication Devices	<u>2A</u> , <u>2B</u> , <u>2C</u>
3	National and International Standards Developing	<u>3A</u> , <u>3B</u> , <u>3C</u>
	Organizations	
4	Basic Health Data Standards	<u>4A, 4B, 4C, 4D, 4E,</u>
		<u>4F</u>
5	EHR Functional Model Standards	<u>5A</u> , <u>5B</u> , <u>5C</u>
6	Health Data Interchange Standards	<u>6A, 6B, 6C</u>
7	Supporting Standards for EHR Applications	<u>7A, 7B, 7C, 7D</u>
8	Enterprise Architecture Models	<u>8A</u>
9	Privacy, Confidentiality, and Security Issues and Standards	<u>9A, 9B</u>
10	Health Information Exchange	<u>10A</u>

### Component 11: Configuring Electronic Health Records

Unit No.	Unit Title	Lectures
1	Migration to an Electronic Health Record System	<u>1A</u> , <u>1B</u>
2	Patient Care Clinical Workflow; Multiple Perspectives of	<u>2A</u>
	Patient Care (VistA Demo)	
3	Implementing Clinical Decision Support (VistA Demo)	<u>3A</u>
4	Building Order Sets (VistA Demo)	<u>4A</u>
5	Creating Data Entry Templates (VistA Demo)	<u>5A</u>
6	Health Summary and Clinical Reminder Reports (VistA	<u>6A</u>
	Demo)	
7	Privacy and Security in the US	<u>7A, 7B, 7C, 7D, 7E,</u>
		<u>7F</u>
8	Meaningful Use and Implementation	<u>8A</u> , <u>8B</u>

#### Component 14: Vendor-Specific Systems

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Unit No.	Unit Title	Lectures
1	Common Commercial Electronic Health Record (EHR)	<u>1A</u>
	Systems Used in Ambulatory and Inpatient Care Settings	
2	Certification of Commercial EHRs	<u>2A</u>
3	How Do Organizations Select an EHR? Lessons From the	<u>3A</u>
	Front Lines	
4	Electronic Health Record Functionality	<u>4A</u>
5	System and Database Architectures Used in Commercial	<u>5A</u>
	EHRs	
6	Vendor Strategies for Terminology, Knowledge Management,	<u>6A</u>
	and Data Exchange	
7	Assessing Decision Support Capabilities of Commercial	<u>7A</u>
	EHRs	
8	EHR Go-Live Strategies	<u>8A</u>

## Component 16: Professionalism/ Customer Service in the Health Environment

Unit No.	Unit Title	Lectures
1	Customer Service in Healthcare IT	<u>1A</u> , <u>1B</u>
2	Professional Behavior in the Healthcare Environment	<u>2A</u>
3	Overview of Communication Relevant to Health IT	<u>3A</u>
4	Key Elements of Effective Communication	<u>4A</u> , <u>4B</u> , <u>4C</u>
5	Regulatory Issues: HIPAA and Standard Precautions	<u>5A</u>
6	Team and Small Group Communication	<u>6A</u> , <u>6B</u>
7	Conflict Resolution	<u>7A</u> , <u>7B</u>
8	Ethical and Cultural Issues Related to Communication and	<u>8A</u> , <u>8B</u>
	Customer Service	
9	Personal Communications and Professionalism	<u>9A</u>