

COURSE SLO ASSESSMENT 4-YEAR TIMELINE

Course ID	Course Name	Course SLO Title	Course SLO Assessment Cycle	Course SLO Statement
ECC: ECHT 11	Introduction to Electronics	SLO #1 Measuring Voltages and Currents	2013-14 (Fall 2013)	Measuring Voltage and Current The student will make basic “in-circuit” measurements: Alternating Current/Direct Current (AC/DC), Voltages and Currents, and Resistance, using both a Bench and Portable Digital Multimeter (DMM)
ECC: ECHT 11	Introduction to Electronics	SLO #1 Measuring Voltages and Currents	2013-14 (Spring 2014)	Measuring Voltage and Current The student will make basic “in-circuit” measurements: Alternating Current/Direct Current (AC/DC), Voltages and Currents, and Resistance, using both a Bench and Portable Digital Multimeter (DMM)
ECC: ECHT 11	Introduction to Electronics	SLO #1 Measuring Voltages and Currents	2017-18 (Fall 2017)	Measuring Voltage and Current The student will make basic “in-circuit” measurements: Alternating Current/Direct Current (AC/DC), Voltages and Currents, and Resistance, using both a Bench and Portable Digital Multimeter (DMM)
ECC: ECHT 11	Introduction to Electronics	SLO #2 Experimental Data and Analysis Reporting	2013-14 (Spring 2014)	The students will be able to incorporate experimental data and analysis reporting protocols, using either “paper” or “paperless” environments, similar to data reporting and analysis used by many Electronics Manufacturers and Service Organizations
ECC: ECHT 11	Introduction to Electronics	SLO #2 Experimental Data and Analysis Reporting	2017-18 (Fall 2017)	The students will be able to incorporate experimental data and analysis reporting protocols, using either “paper” or “paperless” environments, similar to data reporting and analysis used by many Electronics Manufacturers and Service Organizations
ECC: ECHT 11	Introduction to Electronics	SLO #3 Circuit Analysis Calculations	2013-14 (Spring 2014)	The students will be able to use various circuit analysis calculations to predict a basic circuits operation
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ECC: ECHT 11	Introduction to Electronics	SLO #3 Circuit Analysis Calculations	2018-19 (Fall 2018)	The students will be able to use various circuit analysis calculations to predict a basic circuits operation
ECC: ECHT 110	Introduction to Direct and Alternating Current Circuits	SLO #1 Measuring Voltage, Current & Resistance	2015-16 (Spring 2016)	The student will make advanced “in- circuit” measurements : Alternating Current/Direct Current (AC/DC), Voltages, Currents, and Resistance, using both a Bench and Portable Digital Multimeter (DMM).
ECC: ECHT 110	Introduction to Direct and Alternating Current Circuits	SLO #1 Measuring Voltage, Current & Resistance	2017-18 (Fall 2017)	The student will make advanced “in- circuit” measurements : Alternating Current/Direct Current (AC/DC), Voltages, Currents, and Resistance, using both a Bench and Portable Digital Multimeter (DMM).
ECC: ECHT 110	Introduction to Direct and Alternating Current Circuits	SLO #2 Direct & Alternating Currents	2015-16 (Spring 2016)	The student will use an Electronic Simulation Software Package similar to Multi-SIM or “P” Spice to supplement both the understanding and analysis of Direct and Alternating Current Circuits.
ECC: ECHT 110	Introduction to Direct and Alternating Current Circuits	SLO #2 Direct & Alternating Currents	2016-17 (Fall 2016)	The student will use an Electronic Simulation Software Package similar to Multi-SIM or “P” Spice to supplement both the understanding and analysis of Direct and Alternating Current Circuits.
ECC: ECHT 110	Introduction to Direct and Alternating Current Circuits	SLO #2 Direct & Alternating Currents	2018-19 (Fall 2018)	The student will use an Electronic Simulation Software Package similar to Multi-SIM or “P” Spice to supplement both the understanding and analysis of

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ECC: ECHT 110	Introduction to Direct and Alternating Current Circuits	SLO #2 Direct & Alternating Currents	2018-19 (Fall 2018)	Direct and Alternating Current Circuits.
ECC: ECHT 110	Introduction to Direct and Alternating Current Circuits	SLO #3 Circuit Analysis Calculations	2015-16 (Spring 2016)	The student will be able to use various circuit analysis calculations to predict basic circuit operation.
ECC: ECHT 110	Introduction to Direct and Alternating Current Circuits	SLO #3 Circuit Analysis Calculations	2019-20 (Fall 2019)	The student will be able to use various circuit analysis calculations to predict basic circuit operation.
ECC: ECHT 120	Semiconductor Circuits I	SLO #1 In-Circuit Measurements	2015-16 (Fall 2015)	The student will make basic "in-circuit" measurements using Bench and Portable Digital Multimeter (DMM), Oscilloscope, and Voltage Ohm (VOM), Milliamp Meter on Solid-State Systems.
ECC: ECHT 120	Semiconductor Circuits I	SLO #1 In-Circuit Measurements	2018-19 (Fall 2018)	The student will make basic "in-circuit" measurements using Bench and Portable Digital Multimeter (DMM), Oscilloscope, and Voltage Ohm (VOM), Milliamp Meter on Solid-State Systems.
ECC: ECHT 120	Semiconductor Circuits I	SLO #2 Circuit Analysis Calculations	2016-17 (Fall 2016)	The student will be able to use various circuit analysis calculations to predict basic circuit operation.
ECC: ECHT 120	Semiconductor Circuits I	SLO #2 Circuit Analysis Calculations	2019-20 (Fall 2019)	The student will be able to use various circuit analysis calculations to predict basic circuit operation.
ECC: ECHT 120	Semiconductor Circuits I	SLO #3 Amplifier Operation	2017-18 (Fall 2017)	The student will be able to explain the operation of : clippers, clampers, Amplifier Biasing, Input/Output Impedances, Classes of different types of Bipolar Transistor Amplifiers.
ECC: ECHT 122	Semiconductor Circuits II	SLO #1 Advanced In-Circuit Measurements	2016-17 (Spring 2017)	The student will make advanced "in-circuit" measurements using Bench and Portable Digital Multimeter (DMM), Oscilloscope, and Voltage Ohm (VOM), Milliamp Meter on Solid-State-Systems
ECC: ECHT 122	Semiconductor Circuits II	SLO #2 Field Effect Amplifier	2016-17 (Spring 2017)	Given a schematic diagram of a basic Field Effect Amplifier, the students will be able to assemble, test and measure the circuit for its operational parameters.
ECC: ECHT 122	Semiconductor Circuits II	SLO #3 Experimental Data and Analysis Reporting	2014-15 (Spring 2015)	The students will be able to incorporate experimental data and analysis reporting protocols, using either "paper" or "paperless" environments, similar to data reporting and analysis used by many Electronics Manufacturers and Service Organizations
ECC: ECHT 122	Semiconductor Circuits II	SLO #3 Experimental Data and Analysis Reporting	2018-19 (Spring 2019)	The students will be able to incorporate experimental data and analysis reporting protocols, using either "paper" or "paperless" environments, similar to data reporting and analysis used by many Electronics Manufacturers and Service Organizations
ECC: ECHT 124	Operational Amplifiers and Linear Integrated Circuits	SLO #1 Operational Amplifier	2015-16 (Spring 2016)	Given a schematic diagram of a basic Operational Amplifier (Op) with negative feedback, the students will be able to assemble, test and measure the circuit for its operational parameters
ECC: ECHT 124	Operational Amplifiers and Linear Integrated Circuits	SLO #1 Operational Amplifier	2017-18 (Spring 2018)	Given a schematic diagram of a basic Operational Amplifier (Op) with negative feedback, the students will be able to assemble, test and measure the circuit for its operational parameters
ECC: ECHT 124	Operational Amplifiers and Linear Integrated Circuits	SLO #1 Operational Amplifier	2019-20 (Spring 2020)	Given a schematic diagram of a basic Operational Amplifier (Op) with negative feedback, the students will be able to assemble, test and measure the circuit for its operational parameters

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ECC: ECHT 124	Operational Amplifiers and Linear Integrated Circuits	SLO #2 Advanced In-Circuit Measurements	2017-18 (Spring 2018)	The student will make advanced “in-circuit” measurements using Bench and Portable Digital Multimeter (DMM), Oscilloscope, and Voltage Ohm (VOM), Milliamp Meter, on Advanced Solid-State-Systems.
ECC: ECHT 124	Operational Amplifiers and Linear Integrated Circuits	SLO #2 Advanced In-Circuit Measurements	2019-20 (Spring 2020)	The student will make advanced “in-circuit” measurements using Bench and Portable Digital Multimeter (DMM), Oscilloscope, and Voltage Ohm (VOM), Milliamp Meter, on Advanced Solid-State-Systems.
ECC: ECHT 124	Operational Amplifiers and Linear Integrated Circuits	SLO #3 Experimental Data and Analysis Reporting	2015-16 (Spring 2016)	The students will be able to incorporate experimental data and analysis reporting protocols, using either “paper” or “paperless” environments, similar to data reporting and analysis used by many Electronics Manufacturers and Service Organizations.
ECC: ECHT 124	Operational Amplifiers and Linear Integrated Circuits	SLO #3 Experimental Data and Analysis Reporting	2017-18 (Spring 2018)	The students will be able to incorporate experimental data and analysis reporting protocols, using either “paper” or “paperless” environments, similar to data reporting and analysis used by many Electronics Manufacturers and Service Organizations.
ECC: ECHT 124	Operational Amplifiers and Linear Integrated Circuits	SLO #3 Experimental Data and Analysis Reporting	2019-20 (Spring 2020)	The students will be able to incorporate experimental data and analysis reporting protocols, using either “paper” or “paperless” environments, similar to data reporting and analysis used by many Electronics Manufacturers and Service Organizations.
ECC: ECHT 130	Digital Systems and Computer Logic I	SLO #1 DeMorgan’s Theorem	2015-16 (Fall 2015)	The student will use DeMorgan’s Theorem to reduce a Boolean Statement in its simplest terms.
ECC: ECHT 130	Digital Systems and Computer Logic I	SLO #1 DeMorgan’s Theorem	2018-19 (Fall 2018)	The student will use DeMorgan’s Theorem to reduce a Boolean Statement in its simplest terms.
ECC: ECHT 130	Digital Systems and Computer Logic I	SLO #2 Seven Basic Function Gates	2015-16 (Spring 2016)	The student will use discrete NOR and NAND Gates to construct all seven basic function gates (NOT, OR, NOR, AND, NAND, EXOR, and EXNOR)
ECC: ECHT 130	Digital Systems and Computer Logic I	SLO #2 Seven Basic Function Gates	2019-20 (Fall 2019)	The student will use discrete NOR and NAND Gates to construct all seven basic function gates (NOT, OR, NOR, AND, NAND, EXOR, and EXNOR)
ECC: ECHT 130	Digital Systems and Computer Logic I	SLO #3 Experimental Data and Analysis Reporting	2017-18 (Fall 2017)	The students will be able to incorporate experimental data and analysis reporting protocols, using either “paper” or “paperless” environments, similar to data reporting and analysis used by many Electronics Manufacturers and Service Organizations
ECC: ECHT 140	Computer Systems and Hardware Technology I	SLO #1 Course Notebook Students	2016-17 (Spring 2017)	The students will assemble and maintain a five-section course notebook.
ECC: ECHT 140	Computer Systems and Hardware Technology I	SLO #2 Component Handling Techniques	2016-17 (Spring 2017)	The student will be able to demonstrate their knowledge in proper component handling techniques, especially regarding (ESD), Electrostatic Discharge.
ECC: ECHT 140	Computer Systems and Hardware Technology I	SLO #3 Computer Estimate and Configuration	2016-17 (Spring 2017)	The student will be able to demonstrate their ability to cost out and configure either a Business or “Gaming” Computer per customer specifications.
ECC: ECHT 142	Computer Systems and Hardware Technologies II	SLO #1 Course Notebook	2017-18 (Spring 2018)	The students will assemble and maintain a five-section course notebook.
ECC: ECHT 142	Computer Systems and Hardware Technologies II	SLO #2 Troubleshooting Techniques	2017-18 (Spring 2018)	The student will be able to demonstrate advanced skill levels in their knowledge of repairing computer systems using system troubleshooting techniques introduced within the scope of the class.

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ECC: ECHT 142	Computer Systems and Hardware Technologies II	SLO #3 OEM Specifications	2017-18 (Spring 2018)	The student will be able to demonstrate their knowledge in using commercially available diagnostic tools to verify a system meets original equipment manufacturer (OEM) specifications.
ECC: ECHT 144	CompTIA A+ Certification Preparation for Computer Hardware Systems	SLO #1 Course Notebook	2016-17 (Spring 2017)	The students will assemble and maintain a five-section course notebook.
ECC: ECHT 144	CompTIA A+ Certification Preparation for Computer Hardware Systems	SLO #2 CompTIA Industry Certification	2016-17 (Spring 2017)	The student will acquire a knowledge base to prepare to take the A+ Certification Exam through CompTIA, an industry recognized certification.
ECC: ECHT 144	CompTIA A+ Certification Preparation for Computer Hardware Systems	SLO #3 Electricity & Electronics	2016-17 (Spring 2017)	The student will acquire a knowledge in safety and the basics of electricity and electronics, micro-computer hardware and components.
ECC: ECHT 146	CompTIA Network+ Certification Preparation for Computer Hardware Systems	SLO #1 Course Notebook	2017-18 (Fall 2017)	The students will assemble and maintain a five-section course notebook.
ECC: ECHT 146	CompTIA Network+ Certification Preparation for Computer Hardware Systems	SLO #2 CompTIA Network+ Certification Exam	2017-18 (Fall 2017)	Students will develop the skills and knowledge required for passing the CompTIA Network+ Certification exam. Topics include set up configuration and troubleshooting of networking hardware devices. Other areas explored include networking topology, cabling, wireless devices, network standards, protocols and security.
ECC: ECHT 146	CompTIA Network+ Certification Preparation for Computer Hardware Systems	SLO #3 Open Systems Interconnection	2017-18 (Fall 2017)	Students will demonstrate their knowledge of Open Systems Interconnection (OSI), the seven layers of the OSI model, protocol and data packets, and the standard network model.
ECC: ECHT 148	CompTIA Security+ Certification Preparation for Computer Hardware Systems	SLO #1 Course Notebook	2013-14 (Fall 2013)	The students will assemble and maintain a five-section course notebook.
ECC: ECHT 148	CompTIA Security+ Certification Preparation for Computer Hardware Systems	SLO #1 Course Notebook	2017-18 (Summer 2018)	The students will assemble and maintain a five-section course notebook.
ECC: ECHT 148	CompTIA Security+ Certification Preparation for Computer Hardware Systems	SLO #1 Course Notebook	2018-19 (Spring 2019)	The students will assemble and maintain a five-section course notebook.
ECC: ECHT 148	CompTIA Security+ Certification Preparation for Computer Hardware Systems	SLO #2 Information Security	2017-18 (Summer 2018)	Students will demonstrate their knowledge of information security, system threats and risks, protecting systems, network vulnerabilities, network defenses, wireless network security, security audits and policies, cryptographic methods, and the basics of computer forensics
ECC: ECHT 148	CompTIA Security+ Certification Preparation for Computer Hardware Systems	SLO #2 Information Security	2018-19 (Spring 2019)	Students will demonstrate their knowledge of information security, system threats and risks, protecting systems, network vulnerabilities, network defenses, wireless network security, security audits and policies, cryptographic methods, and the basics of computer forensics
ECC: ECHT 148	CompTIA Security+ Certification Preparation for	SLO #3 Cybersecurity	2017-18 (Summer 2018)	Students will demonstrate their knowledge of "Chain of Custody" handling procedures of physical evidence in matters of cybersecurity.

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ECC: ECHT 148	Computer Hardware Systems	SLO #3 Cybersecurity	2017-18 (Summer 2018)	Students will demonstrate their knowledge of “Chain of Custody” handling procedures of physical evidence in matters of cybersecurity.
ECC: ECHT 148	CompTIA Security+ Certification Preparation for Computer Hardware Systems	SLO #3 Cybersecurity	2018-19 (Spring 2019)	Students will demonstrate their knowledge of “Chain of Custody” handling procedures of physical evidence in matters of cybersecurity.
ECC: ECHT 191	Introduction to Microprocessors and Interfacing	SLO #1 Machine Assembly Language	2014-15 (Summer 2015)	Students will demonstrate their knowledge of fundamentals of machine assembly language
ECC: ECHT 191	Introduction to Microprocessors and Interfacing	SLO #1 Machine Assembly Language	2016-17 (Spring 2017)	Students will demonstrate their knowledge of fundamentals of machine assembly language
ECC: ECHT 191	Introduction to Microprocessors and Interfacing	SLO #2 Digital & Analog Interfacing	2013-14 (Spring 2014)	Students will demonstrate their use of software to simulate hardware and digital and analog interfacing.
ECC: ECHT 191	Introduction to Microprocessors and Interfacing	SLO #2 Digital & Analog Interfacing	2014-15 (Summer 2015)	Students will demonstrate their use of software to simulate hardware and digital and analog interfacing.
ECC: ECHT 191	Introduction to Microprocessors and Interfacing	SLO #2 Digital & Analog Interfacing	2016-17 (Spring 2017)	Students will demonstrate their use of software to simulate hardware and digital and analog interfacing.
ECC: ECHT 191	Introduction to Microprocessors and Interfacing	SLO #3 Microprocessors and Microcontrollers	2014-15 (Summer 2015)	Students will demonstrate their knowledge of microprocessors and microcontrollers as they relate to industrial and consumer equipment.
ECC: ECHT 191	Introduction to Microprocessors and Interfacing	SLO #3 Microprocessors and Microcontrollers	2016-17 (Spring 2017)	Students will demonstrate their knowledge of microprocessors and microcontrollers as they relate to industrial and consumer equipment.
ECC: ECHT 22	Basic Electronic Fabrication	SLO #1 Tools & Test Equipment	2014-15 (Spring 2015)	Upon successful completion of this course, students will be able to identify and safely operate/manipulate various types of electronic hand tools and test equipment.
ECC: ECHT 22	Basic Electronic Fabrication	SLO #1 Tools & Test Equipment	2017-18 (Spring 2018)	Upon successful completion of this course, students will be able to identify and safely operate/manipulate various types of electronic hand tools and test equipment.
ECC: ECHT 22	Basic Electronic Fabrication	SLO #2 Experimental Data and Analysis Reporting	2014-15 (Spring 2015)	The students will be able to incorporate experimental data and analysis reporting protocols, using either “paper” or “paperless” environments, similar to data reporting and analysis used by many Electronics Manufacturers and Service Organizations.
ECC: ECHT 22	Basic Electronic Fabrication	SLO #2 Experimental Data and Analysis Reporting	2018-19 (Fall 2018)	The students will be able to incorporate experimental data and analysis reporting protocols, using either “paper” or “paperless” environments, similar to data reporting and analysis used by many Electronics Manufacturers and Service Organizations.
ECC: ECHT 22	Basic Electronic Fabrication	SLO #3 Low Voltage Power Supply	2014-15 (Spring 2015)	Upon successful completion of this course, students will be able to produce a functional low voltage, direct current (DC) power supply project sample that

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ECC: ECHT 22	Basic Electronic Fabrication	SLO #3 Low Voltage Power Supply	2014-15 (Spring 2015)	meets predetermined specifications and which could be potentially mass produced.
ECC: ECHT 22	Basic Electronic Fabrication	SLO #3 Low Voltage Power Supply	2019-20 (Fall 2019)	Upon successful completion of this course, students will be able to produce a functional low voltage, direct current (DC) power supply project sample that meets predetermined specifications and which could be potentially mass produced.