



Technical Education
and Skills Development Authority

Webliography

The Webliography is an electronic bibliographic listing of topics related to the qualification titles of a particular TVET priority sector, with pre-searched *URLs* (uniform resource locators) and descriptions (abstracts).

The pre-searched *URLs* provide contents in reference to the title of promulgated Training Regulations (TR). By clicking the weblinks (underlined *URLs* in blue text), your internet browser will direct you to the website/webpage where you can find the topic related to the title you selected. The Webliography is a useful tool for trainers who are designing and developing competency-based curriculum and learning materials.

[TESDA](#) » [Webliography](#) » [Electrical and Electronics Sector](#)

INTERNET RESOURCES

Electrical and Electronics Sector

Scope:

Electronics technology deals with the emission and effects of electrons and the operation of electronic devices usually powered by small amounts of electricity. It is actually the science on how to control electric energy in which electrons have a fundamental role. Electronics deals with electrical circuits that involve active electrical components such as vacuum tubes, transistors, diodes and integrated circuits, and associated passive electrical components and interconnection technologies.

Source:

<http://en.wikipedia.org/wiki/Electronics>

List of qualifications:

- Computer Systems Servicing NC II
- Consumer Electronics Servicing NC II, III and IV
- Electrical Installation and Maintenance NC II, III and IV
- Electronic Products Assembly and Servicing NC II
- Electronics Back-End Operation NC II
- Electronics Front-of-line Operation NC II
- Instrumentation and Control Servicing NC II, III and IV
- Mechatronics Servicing NC II, III and IV
- Semiconductor Back-End Operation NC II
- Semiconductor Front-of-line Operation NC II

❖ Definition of electronics

<http://www.thefreedictionary.com/electronics>

This webpage provides definition and meaning of technical terms including translations.

[Updated February 11, 2019]

❖ Electronics engineer job description

http://www.prospects.ac.uk/electronics_engineer_job_description.htm

This webpage provides description on the job of an electronics engineer including typical work activities, job duties, etc.

[Updated February 11, 2019]

❖ Job description of an electronics technician

<https://dot-job-descriptions.careerplanner.com/ELECTRONICS-TECHNICIAN.cfm>

This webpage provides the job description of an electronics technician.

[Updated February 11, 2019]

❖ The Philippine electronics industry

<http://siteresources.worldbank.org/INTPHILIPPINES/Resources/ErnestoSanTiago.pdf>

This webpage presents the status of electronics Philippines.

[Updated February 11, 2019]

❖ Electronics jobs in the Philippines

<http://job-search.jobstreet.com.ph/philippines/browse/electronics-communication-engineering-jobs/>

This webpage provides a list of job providers, job opportunities, contact information and other related information.

[Updated February 11, 2019]

❖ LG career

<http://www.lg.com/ph/career>

This website provides suggestions for choosing a career in LG electronics.

[Updated February 11, 2019]

❖ Philips career

<http://www.philips.com.ph/a-w/careers/homepage.html>

This webpage provides a list of job opportunities in electronics functional areas i.e. engineering, design, quality, intellectual property, sales, finance, HR, marketing, legal, supply chain, research and procurement.

[Updated February 11, 2019]

❖ SGS training services

<http://www.sgs.ph/en/Training-Services/Industry-Based-Training/Consumer-Goods-and-Retail/Electrical-and-Electronics.aspx>

This webpage provides a list of career training in electronics and other industries. Training experts can help incorporate critical compliance requirements from the design stage to the end of the production life cycle.

[Updated February 11, 2019]

INTERNET RESOURCES

Computer Systems Servicing NC II

Core Competencies

- Install and configure computer systems
- Set-up Computer Networks
- Set-up Computer Servers
- Maintain and Repair Computer Systems and Networks

Consumer Electronics NC II

Core Competencies

- Assemble/ disassemble consumer electronic products and systems
- Maintain and repair audio/ video products and systems
- Maintain and repair electronically-controlled domestic appliances
- Maintain and repair cellular phones

Consumer Electronics NC III

Core Competencies

- Commission consumer electronic products and systems
- Develop servicing systems for consumer electronic products and systems
- Train Service Technicians

❖ Computer maintenance definition

http://en.wikipedia.org/wiki/Computer_maintenance

This webpage defines computer maintenance as the practice of keeping computers in a good state of repair.

[Updated February 11, 2019]

❖ How to Configure a Computer to Multi Boot Operating Systems

<https://www.wikihow.com/Configure-a-Computer-to-Multi-Boot-Operating-Systems>

This webpage provides instructions with illustrations on configuring a computer utilizing multiple operating systems.

[Updated February 11, 2019]

❖ How to Setup a Computer Network

<https://www.lifewire.com/how-to-set-up-a-network-4097198>

This webpage provides information on setting up computer networks at home using broadband routers.

[Updated February 11, 2019]

❖ How to Setup your first server

<https://www.techradar.com/news/computing/servers/how-to-set-up-your-first-server-1166915>

This webpage provides information on installing windows server using Windows Server 2012.

[Updated February 11, 2019]

❖ How to Install Windows Server 2008 R2

<https://www.howtogeek.com/50036/how-to-install-windows-server-2008-r2/>

This webpage provides a guide in installing Windows server 2008 R2 with illustrations and step-by-step instructions.

[Updated February 11, 2019]

❖ Simple Ways to Maintain Your Computer

<https://www.lifewire.com/maintain-computer-4097220>

This webpage provides tips on maintaining computers, software and files.

[Updated February 11, 2019]

❖ Consumer electronics definition

http://en.wikipedia.org/wiki/Consumer_electronics

This webpage provides descriptions of consumer electronics as electronic equipment intended for everyday use, most often in entertainment, communications and office productivity. In British English they are often called brown goods by producers and sellers

[Updated February 11, 2019]

❖ Consumer electronics

<https://www.euromonitor.com/consumer-electronics-in-the-philippines/report>

This webpage provides information about the condition of consumer electronics industry in the Philippines. This includes data in on trends and market projections about the viability of consumer products of various manufacturers.

[Updated February 12, 2019]

❖ How to Change Appliance Cords

<https://www.dummies.com/home-garden/home-improvement/electrical-wiring/how-to-change-appliance-cords-and-plugs/>

This webpage provides a guide in replacing electric cords safely

[Updated February 12, 2019]

❖ TV Repairs

<https://www.currys.co.uk/gbuk/tv-repairs-problems-371-commercial.html>

This webpage provides information on repairing digital televisions whether it's LED, LCD or Plasma.

[Updated February 12, 2019]

INTERNET RESOURCES

Consumer Electronics NC IV Core Competencies

- Manage servicing systems for consumer electronics products and systems
- Train Service Technician Supervisors

Electrical installation and maintenance NC II Core Competencies

- Prepare electrical power and hydraulic tools
- Perform roughing-in activities for communication and distribution systems
- Install wiring devices for floor and ground fault current interrupting outlets
- Install electrical protection system for lighting and grounding
- Install electrical lighting systems on auxiliary outlets and lighting fixtures

Electrical installation and maintenance NC III Core Competencies

- Perform roughing-in and wiring activities for three-phase distribution system for power,

❖ Troubleshooting a Failed Speaker Channel

<https://www.lifewire.com/troubleshoot-speaker-channel-3135138>

This webpage provides a guide in troubleshooting speaker channel issues with links to other related topics.

[Updated February 12, 2019]

❖ How to Repair Small Appliances

<https://home.howstuffworks.com/how-to-repair-small-appliances.htm>

This webpage provides tips in troubleshooting any domestic appliance from heating, motor, plugs, wires and connectors.

[Updated February 12, 2019]

❖ How to Fix a Cellular Phone

<https://www.wikihow.com/Fix-a-Cell-Phone>

This webpage provides tips in repairing cellular phones with minor defects.

[Updated February 12, 2019]

❖ Electronics Tutorials

<https://www.electronics-tutorials.ws/>

This webpage provides the theories and principles in electronics.

[Updated February 12, 2019]

❖ Hardware and Embedded Design Services

<https://www.happiestminds.com/services/embedded-design-services/>

This webpage provides information on the various support services in electronics i.e. industrial/ mechanical design, thermal engineering along with regulatory certifications.

[Updated February 12, 2019]

❖ Certified Electronics Technician Education and Training Requirements

https://study.com/certified_electronic_tech.html

This webpage provides the requirements for certified electronics technicians to be able to repair a variety of electronics equipment.

[Updated February 12, 2019]

❖ What is Electrical Maintenance?

<https://www.wisegeek.com/what-is-electrical-maintenance.htm>

This webpage provides information about electrical maintenance, its definition, and scope of work and description of activities.

[Updated February 12, 2019]

❖ The 16 Tools You Need for Electrical Projects

<https://www.thespruce.com/top-electrical-tools-1152575>

This webpage provides the list of tools required for basic electrical jobs.

[Updated February 12, 2019]

❖ What is Electrical Rough-In?

<http://www.acmehowto.com/electrical/remodel/rough-in.php>

This webpage explains the importance and methods of performing roughing-in activities.

[Updated February 12, 2019]

❖ Do it yourself - How to wire a GFCI electrical outlet

https://wireityourself.com/gfci_electrical_outlet.html

This webpage provides information on performing wiring activities using ground fault current interrupting outlets.

[Updated February 12, 2019]

❖ How to Install a New Electrical Lighting Outlet on the Ceiling

<https://homeguides.sfgate.com/install-new-electrical-lighting-outlet-ceiling-68301.html>

This webpage provides a guide on the installation of electrical lighting outlet in the ceiling to connect any lighting fixture, with links to related topics.

[Updated February 13, 2019]

INTERNET RESOURCES

lighting and motor control panel.

- Perform installation of data measurement and control system on electrical and auxiliary equipment
- Install, assemble, test and maintain motor control system

Electrical installation and maintenance NC IV

Core Competencies

- Prepare Electric and hydraulic tools.
- Perform roughing-in and wiring for activities for bus and underfloor ducts.
- Perform installation of wiring devices for floor and ground fault current interrupting outlets.
- Perform installation of standard electrical protection system for lightning and grounding.
- Perform installation of electrical lighting systems, auxiliary outlets and lighting fixtures.
- Perform installation of data measurement and control system on electrical and auxiliary equipment.
- Assemble and install electrical lighting and motor control systems.
- Perform maintenance and troubleshooting works.
- Supervise/Monitor installation and maintenance on electrical systems, auxiliary including control, lighting, power and protection equipment.
- Perform commissioning of electrical equipment/system.
- Perform programming and installation of basic PLC systems

❖ 27 Must-Know Tips for Wiring Switches and Outlets Yourself

<https://www.familyhandyman.com/electrical/wiring/wiring-switches-and-outlets/view-all/>

This webpage provides information
[Updated February 13, 2019]

❖ How to Install Outdoor Lighting and Outlet

<https://www.familyhandyman.com/electrical/outdoor-lighting/how-to-install-outdoor-lighting-and-outlet/view-all/>

This webpage provides the steps in installing electrical lighting and outlets for outdoor use.

[Updated February 13, 2019]

❖ Datacomm office wiring: recommended procedures

<http://ecmweb.com/content/datacom-office-wiring-recommended-procedures>

This webpage describes the EIA/TIA standards for wiring the office.

[Updated February 13, 2019]

❖ Fire Alarm System Facts

<http://ecmweb.com/code-basics/fire-alarm-system-facts>

This webpage advertises Article 760 that explains how to install wiring and equipment for fire alarm systems.

[Updated February 13, 2019]

❖ What is Electrical Maintenance?

<http://www.wisegeek.org/what-is-electrical-maintenance.htm>

This webpage explains how electrical maintenance is required with illustrations.

[Updated February 13, 2019]

❖ Ten Tips on understanding the National Electrical Code

<http://www.codebookcity.com/codearticles/nec/10codetips.htm>

This webpage is intended for engineers, construction workers and refers the standard codes and techniques on electrical works.

[Updated February 13, 2019]

❖ Building Wire and Cable

<http://www.nema.org/products/Pages/Building-Wire-and-Cable.aspx>

This webpage introduces the products of NEMA for electrical wires and cables.

[Updated February 13, 2019]

❖ Flexible Cords, Cables and Fixture Wire

<http://ecmweb.com/code-basics/flexible-cords-cables-and-fixture-wire>

This webpage provides the wiring requirements of article 400, including guidelines for flexible cords, cables and fixtures.

[Updated February 13, 2019]

❖ Wiring a building switchboard from an outdoor transformer

<http://ecmweb.com/content/wiring-building-switchboard-outdoor-transformer>

This webpage explains the rules when installing outdoor transformers."

[Updated February 13, 2019]

❖ Lighting controls

<http://www.facilitiesnet.com/lighting/article/With-Lighting-Controls-Facility-Managers-Should-Understand-Products-Buildings-Wiring--13122>

This webpage explains the importance of carefully selecting lighting control products.

[Updated February 13, 2019]

❖ Principles of Grounding of Lighting Protection Systems

http://www.lightningsafety.com/nlsi_lhm/grounding_principles_NFPA_780.html

This webpage contains explanations on electrical protection system for lighting and grounding

[Updated February 13, 2019]

INTERNET RESOURCES

❖ How to Read Electrical Plans

<https://www.northernarchitecture.us/construction-drawings/o-o-o.html>

This webpage provides information on reading electrical plans.

[Updated February 13, 2019]

❖ Tools, equipment and PPE needed to install electrical wiring

http://www.licensedelectrician.com/Store/Electrician_Tools.htm

This webpage explains the different tools, equipment and PPEs used for installing electrical wiring devices.

[Updated February 13, 2019]

❖ Estimating Electrical bill of materials as per Plan

http://photos.state.gov/libraries/iraq/5/contracting/statement_work.pdf

This webpage provides details on estimating bill of materials for electrical projects.

[Updated February 13, 2019]

❖ Voltage, Current, Resistance and Ohm's Law

<https://learn.sparkfun.com/tutorials/voltage-current-resistance-and-ohms-law/all.pdf>

This webpage provides explanations on electrical charge that relates to voltage, current, and resistance.

[Updated February 13, 2019]

❖ Voltage, Current, Resistance, and Ohm's Law

<https://learn.sparkfun.com/tutorials/voltage-current-resistance-and-ohms-law>

This tutorial will give you the basic understanding of voltage, current, and resistance and how the three relate to each other.

[Updated February 13, 2019]

❖ English and Metric System and Conversion

<http://mathbitsnotebook.com/Algebra1/Units/UNMetricEnglish.html>

This webpage provides information about the *metric system*; and types of measurement (size, weight, capacity), represented by (meter, gram, and liter). A conversion from English to metric system is explained.

[Updated February 13, 2019]

❖ Safety procedures in installing electrical protection system as per PEC and Industry standards

<http://www.slideshare.net/Jerick54/philippine-electrical-code>

This webpage provides a slide presentation of the Philippine Electrical Code that can be downloaded.

[Updated February 13, 2019]

❖ Minimizing risks

http://w3.siemens.com/powerdistribution/global/en/lv/news_installation-technology_installationstechnik/customer-magazines/e-installation/installation-technology/pages/protection-measures-electrical-systems.aspx

This webpage provides a magazine that explains the many sources of electrical hazards from fault currents to overcurrent to overvoltage in the power grid and a comprehensive protection system with interconnecting safety components provides the best safeguard for people and equipment.

[Updated February 13, 2019]

❖ What is Waste Management

<http://www.conserve-energy-future.com/waste-management-and-waste-disposal-methods.php>

This webpage provides a definition of waste management and gives various types and methods of waste disposal including electrical and electronic products.”

[Updated February 13, 2019]

INTERNET RESOURCES

❖ Recycling Electrical Items

<https://www.electricalsafetyfirst.org.uk/guidance/safety-around-the-home/recycling-electrical-items/>

This webpage provides an advice on recycling electrical goods and the reasons for recycling.

[Updated February 15, 2019]

❖ 5S on Good Housekeeping

<http://www.slideshare.net/moralescapri/5s-the-practice-of-good-housekeeping-39501798>

This webpage provides shows a downloadable slide presentation describing and explaining in detail what 5S is in the text transcript.

[Updated February 15, 2019]

❖ Motor Controller Definition

https://en.wikipedia.org/wiki/Motor_controller

This webpage defines electric motor controller as a device or group of devices that serves to govern in some predetermined manner the performance of an electric motor.

[Updated February 15, 2019]

❖ Fundamentals of Motor Control

https://download.schneider-electric.com/files?p_enDocType=Brochure&p_File_Name=0140BR9102.pdf&p_Doc_Ref=0140BR9102

This webpage provides a downloadable 60-page document on the fundamentals of motor control-basic principles and language of AC motor control.

[Updated February 15, 2019]

❖ Electrical Control Wiring

<https://www.youtube.com/watch?v=eHd9EUuMzIU>

This YouTube video shows the procedures in testing and checking electrical control wiring.

[Updated February 15, 2019]

❖ Three Phase Motor Power and Control Wiring Diagrams

<http://www.electricaltechnology.org/2014/06/three-phase-motor-power-control-wiring-diagrams.html>

This webpage shows and explains the different three phase motor connections and different wiring diagrams for motor control systems.

[Updated February 15, 2019]

❖ Electrical Safety at Work

<http://www.hse.gov.uk/electricity/nearelectric.htm>

This webpage emphasizes safety precautions involved in performing electrical installations and maintenance works.

[Updated February 15, 2019]

❖ How to Write a Technical Report

<http://www.sussex.ac.uk/ei/internal/forstudents/engineeringdesign/studyguides/techreportwriting>

This webpage provides a guide in writing a complete technical report.

[Updated February 15, 2019]

❖ Standard Electrical Symbols for Schematic Diagrams

<https://www.edrawsoft.com/electrical-symbols.php>

This webpage shows the standard electrical symbols that are used in drawing and reading electrical schematic diagrams.

[Updated February 15, 2019]

❖ Control Panel Building

<https://www.youtube.com/watch?v=3zOIn5hNsQ0>

This YouTube video shows an example of how to assemble an electrical control panel.

[Updated February 15, 2019]

INTERNET RESOURCES

Electronic Products Assembly and Servicing NC II

Core Competencies

- Assemble Electronic Products
- Service consumer electronic products and systems
- Service industrial electronic modules, products and systems

Electronics Back-End Operation NC II

Core Competencies

- Set up back-end operations workplace for electronics production line
- Analyze, carry-out and monitor back-end operations for electronics production line
- Check quality compliance of back-end operations for electronics production line

Electronics Front-of-line Operation NC II

Core Competencies

- Set up front-of-line (FOL) operations workplace for electronics production line
- Analyze, carry-out and monitor front-of-line (FOL)

❖ Waste Management

https://en.wikipedia.org/wiki/Waste_management

This webpage defines the principle of waste management"
[Updated February 15, 2019]

❖ ICC Mark

http://www.bps.dti.gov.ph/index.php?option=com_content&view=article&id=300:ps-or-icc-mark&catid=72:notice-and-announcements

This webpage pertains about the quality of the product and how to spot fake ICC sticker.

[Updated February 15, 2019]

❖ Printed circuit boards: The benefits of machine-assembly vs. hand-assembly

https://www.electronicproducts.com/Manufacturing/IC_and_Board_Assembly/Printed_circuit_boards_The_benefits_of_machine-assembly_vs_hand-assembly.aspx

This webpage provides information on the history and assembly of printed circuit boards (PCBs) for electronic components and assemblies.

[Retrieved January 6, 2019]

❖ Troubleshooting and Repair of Consumer Electronic Equipment

<https://www.repairfaq.org/sam/tshoot.htm>

This webpage provides a manual of information on the repair of electronic components and assemblies.

[Retrieved January 6, 2019]

❖ Industrial Electronics Repair

<http://www.yorkrepair.com/industrial-electronics-repair>

This webpage provides information and instructions on repairing industrial electronic products and assemblies.

[Retrieved January 6, 2019]

❖ A Guide to Manufacturing Production

<https://www.thebalancesmb.com/manufacturing-process-2221376>

This webpage provides information on setting up a production line for small scale business. It describes the requirements and methods to customize the production line.

[Retrieved January 6, 2019]

❖ Electronic Product Manufacturing

<https://www.startupbizhub.com/electronic-product-manufacturing.htm>

This webpage provides information on setting up a production line for business. It also includes links to related topics.

[Retrieved January 6, 2019]

❖ What makes a good production plan?

<https://www.bdc.ca/en/articles-tools/operations/operational-efficiency/pages/production-plan-top-tips-improving-operations.aspx>

This webpage provides information and strategies to maximize productivity of a production line company.

[Retrieved January 6, 2019]

❖ How to Set Up a Lean Factory That Works, Part I

<https://www.industryweek.com/continuous-improvement/how-set-lean-factory-works-part-1>

This webpage provides information on setting up a lean-oriented production layout for seamless flow of people, material and information.

[Retrieved January 6, 2019]

❖ Seven Common KPIs for Production Monitoring

<http://www.redlion.net/resources/white-papers/seven-common-kpis-production-monitoring>

INTERNET RESOURCES

operations for electronics production line

- Check quality compliance of front-of-line (FOL) operations for electronics production line

Instrumentation and Control Servicing NC II

Core Competencies

- Install Instrumentation and Control Devices
- Calibrate Instrumentation and Control Devices
- Configure Instrumentation and Control Devices

Instrumentation and Control Servicing NC III

Core Competencies

- Loop Check Instrumentation and Control Devices
- Maintain and Repair Instrumentation and Control Devices

Instrumentation and Control Servicing NC IV

Core Competencies

- Start-up and Commissioning Instrumentation & Control Systems
- Diagnose and Troubleshoot Instrumentation & Control Systems

This webpage provides strategic philosophies or practices in manufacturing using Kaizen, Six Sigma, Total Quality Management and Continuous Improvement.

[Retrieved January 6, 2019]

❖ Product Inspection Monitoring

<https://www.qima.com/quality-control-services/product-and-manufacturing-inspections>

This webpage provides strategies in inspecting various stages of the manufacturing process to help secure production and safeguard quality of products.

[Retrieved January 6, 2019]

❖ Instrumentation and control servicing definition

http://en.wikipedia.org/wiki/Instrumentation_and_control_engineering

This webpage provides descriptions of Instrumentation and control engineering as the art and science of measurement and control of process variables within a production or manufacturing area. The process variables used in industries are Level, Pressure, Temperature, Humidity, Flow, pH, Force, Speed etc.

[Updated February 18, 2019]

❖ Instrumentation and control servicing NC II in the Philippines

<http://www.courses.com.ph/instrumentation-and-control-servicing-nc-ii-tesda-course-philippines/>

This webpage provides brief introduction of the course including admission, assessment and certification requirements.

[Updated February 18, 2019]

❖ Basic Instrumentation Measuring Devices and Basic PID Control

<http://www.pacontrol.com/download/BASIC-INSTRUMENTATION-MEASURING-DEVICES-AND-BASIC-PID-CONTROL.pdf>

This webpage provides information about measuring devices for use in instrumentation and control servicing.

[Updated February 18, 2019]

❖ Basic Principles of Instrument Calibration

<https://www.instrumentationtoolbox.com/2012/12/understanding-instrument-calibration.html>

This webpage provides information about the principles in calibrating instrumentation devices.

[Retrieved February 18, 2019]

❖ How to Configure MBE Driver?

<http://vakratoond.com/instrumentation/configure-mbe-driver/>

This webpage provides information in configuring Modbus Ethernet (MBE) driver.

[Retrieved February 18, 2019]

❖ WirelessHART device Configuration

<https://instrumentationtools.com/wirelesshart-device-configuration/>

This webpage provides information in configuring WirelessHART field instruments i.e. the Rosemount model 648 temperature transmitters.

[Retrieved February 18, 2019]

❖ Loop Checking of 4-20mA or HART Transmitters

<https://instrumentationtools.com/loop-checking-4-20-mahart-transmitters/>

This webpage provides information in loop checking 4-20 mA HART transmitter

[Retrieved February 18, 2019]

❖ Troubleshooting Instrumentation & Control Systems

http://www.isawwsymposium.com/wp-content/uploads/2014/09/WWAC2014_Invited_Lovell_presentation.pdf

This webpage provides a PowerPoint presentation that guides in

INTERNET RESOURCES

Mechatronics Servicing NC II

Core Competencies

- Install Mechatronics Devices
- Configure and Test Mechatronics Devices

Mechatronics Servicing NC III

Core Competencies

- Develop Mechatronics Control Circuits and Software Application Programs
- Maintain and Repair Mechatronics Devices

Mechatronics Servicing NC IV

Core Competencies

- Commission Mechatronics Systems
- Diagnose and Troubleshoot Mechatronics Systems

Semiconductor Back-End Operation NC II

Core Competencies

- Set up back-end operations workplace for semiconductor production line
- Analyze, carry-out and monitor back-end operations for semiconductor production line
- Check quality compliance of back-end operation for semiconductor production line

Semiconductor Front-of-line Operation NC II

troubleshooting instrumentation and control systems.

[Retrieved February 18, 2019]

❖ Mechatronics definition

<http://en.wikipedia.org/wiki/Mechatronics>

This webpage provides descriptions of mechatronics as a multidisciplinary field of engineering that includes a combination of mechanical engineering, electrical engineering, telecommunications engineering, control engineering and computer engineering. As technology advances the subfields of engineering multiply and adapt. Mechatronics' aim is a design process that unifies these subfields.

[Updated February 18, 2019]

❖ How to install Scilab under Windows

<https://x-engineer.org/graduate-engineering/programming-languages/scilab/how-to-install-scilab-under-windows/>

This webpage provides information and guide in installing Scilab 5.4.0 under Windows as programming/ simulation environment

[Updated February 18, 2019]

❖ How to use Device Manager to configure devices in Windows Server 2003

<https://support.microsoft.com/en-gb/help/323423/how-to-use-device-manager-to-configure-devices-in-windows-server-2003>

This webpage provides a guide in using device manager to configure hardware devices that are installed on Windows Server 2003-based computer.

[Updated February 18, 2019]

❖ 19 Mechatronics engineer jobs in the Philippines

<http://www.careerjet.ph/mechatronics-engineer-jobs.html>

This webpage provides information and list of job opportunities in mechatronics industry from technician level up to mechatronics engineers.

[Updated February 18, 2019]

❖ Mechatronics and robotics society of the Philippines

https://jrcanedo2.files.wordpress.com/2008/02/mrsp_overview.pdf

This webpage provides information about the MRSP, its mission and objectives, research, education and training certification, promotion, information network, membership and linkages benefits, addresses and contacts.

[Updated February 18, 2019]

❖ A Guide to Manufacturing Production

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[Retrieved 8 January 6, 2019]

❖ Electronic Product Manufacturing

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This webpage provides information on setting up a production line for business. It also includes links to related topics.

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❖ What makes a good production plan?

<httpsttps://www.bdc.ca/en/articles-tools/operations/operational-efficiency/pages/production-plan-top-tips-improving-operations.aspx>

This webpage provides information and strategies to maximize productivity of a production line company.

[Retrieved 8 January 6, 2019]

❖ How to Set Up a Lean Factory That Works, Part I

<https://www.industryweek.com/continuous-improvement/how-set-lean-factory-works-part-1>

INTERNET RESOURCES

Core Competencies

- Setup front-of-line (FOL) operations workplace for semiconductor production line
- Analyze, carry-out and monitor front-of-line (FOL) operations for semiconductor production line
- Check quality compliance of front-of-line (FOL) operations for semiconductor production line

This webpage provides information on setting up a lean-oriented production layout for seamless flow of people, material and information.

[Retrieved 8 January 6, 2019]

❖ **Seven Common KPIs for Production Monitoring**

<http://www.redlion.net/resources/white-papers/seven-common-kpis-production-monitoring>

This webpage provides strategic philosophies or practices in manufacturing using Kaizen, Six Sigma, Total Quality Management and Continuous Improvement.

[Retrieved 8 January 6, 2019]

❖ **Product Inspection Monitoring**

<https://www.qima.com/quality-control-services/product-and-manufacturing-inspections>

This webpage provides strategies in inspecting various stages of the manufacturing process to help secure production and safeguard quality of products.

[Retrieved 8 January 6, 2019]