-	UNIT	EQUIPMENT
	MACHINE UNITS	
		Equipment ● d.c. machine ● ac machine ● Prime mover ● 1 x analogue voltmeter ● 2 x analogue ammeters ● ELV AC power supply ● DC Circuit breaker ● DC Contactor ● DC Power Supply ● Surge protection device Materials ● Variable load ● Field rheostat ● Switch ● Fuse ● Multimeter **Miscellaneous Items:** ● PPE ● Hand tools ● Connection leads
	ANALOG AND DIGITAL ELECTRONICS UNITS	
		Equipment ● Digital Trainer Kit ● Digital Probe ● Electronic Trainer Kit ● d.c. power supply **10 V** ● analogue voltmeter ● analogue ammeter ● fuse and switch

		• connection leads Materials • 4 mm^2 connecting leads • Multimeter **Miscellaneous Items:** • Colour pens/pencils & ruler
	ELECTRONIC CONTROL UNITS	
		Equipment • Cathode oscilloscope • Variable Frequency Power Supply • Electronic Trainer Kit • IC Cards • Diode • Transistor • Silicon Control Rectifier • ICs • Resistors various bands • Capacitors various bands • DC Power Supply • AC DC Converters • DC DC Converter • LEDS • LED Drivers • Heat sinks • Soldering Iron • Breadboard • Solders • Signal lamps • DC Relays • Circuit simulator software Materials

		• 4 mm^2 connecting leads • Multimeter **Miscellaneous Items:** Colour pens/pencils & ruler

	POWER SUPPLY UNITS	
		Equipment • Diode Retifier • Capacitor • 240v to 12 v step down transformer • Filter • Zener diode • Voltage regulator card • Regulated power supply card • Variable DC Power supply • Circuit design instruction books Materials • 4 mm^2 connecting leads • Multimeter Materials • 4 mm^2 connecting leads • Multimeter **Miscellaneous Items:** • Colour pens/pencil • Ruler
	CIRCUIT ANALYSIS UNITS	
		Equipment

		• Resistors various bands • Capacitors various bands • DC Power Supply • Variable frequency power supply • Inductors • Electronic circuit trainer • Breadboard Materials • 4 mm^2 connecting leads • Multimeter **Miscellaneous Items:** • Colour pens/pencil • Ruler
	ENGINEERING COMPUTER APPLICATION SOFTWARE UNITS*	
	UEECS0033 Use engineering applications software on personal computers	Equipment • CAD Software • Fusion 360 • Tinkercad • SketchUp • Electronic Symbol • Electrical CAD Materials • Pen / Pencil • Paper • Graph paper **Miscellaneous Items:** • Colour pens/pencil • Ruler
	ELECTRICAL APPARATUS UNITS	

		Equipment • Wiring booth • Distribution board • Selection of circuit breakers and RCDs • Selection of isolators and switches • Pendant socket-outlet • 5-pin socket-outlet • Downlight and ancillary equipment • Smoke detector • Digital multimeter • IR tester • Battery drill Materials • Selection of LV cables, including: TPI Flat TPS Circular TPS Flexible cable • Selection of wiring supports, including: Cable tray Conduit Catenary wire and supports • Fittings and fixings for cable tray and conduit • Snake • Cable ties • Cable glands **Miscellaneous Items:** • Hand tools • PPE • AS/NZS 3000 (current edition)

	MANAGEMENT UNITS	•
		• Computer and Internet • Writing equipment pencil , • paper , pen
	GENERTAL COMPUTER APPLICATION UNITS	
		Equipment • Computer (laptop, desktop or tablet). • Internet access. • External storage Materials • USB stick. • Pens/pencils. **Miscellaneous Items:** • Word processor. • Spreadsheet software. • Email account.
	INDUSTRIAL CONTROL SYSTEM UNITS	
		Equipment • G Soft GEN NX Software • G Soft GEN NX PLC • Trilogy PLC Software • Scada Software • Distributor frames • Termination blocks • Modular sockets • 50 pair, 20 pair, 4 pair, 2 pair and jumper cables • Catenary system • Suitable earth cables • Hand tools and test equipment • PLC Trainer

		• Circuit simulator software Materials • AS/NZS 3000 (current edition) • AS/NZS 3008 Part 1.1 (current edition) • Local Service and Installation Rules (SIR) • Pens/Pencils • Ruler • Calculator • Manufacturer's catalogues – switchgear and controlgear • Screwdrivers • Krone tool • Battery drill • Cable strippers • Diagonal cutters • DMM • F set • Buttinski • Cable Wizard **Miscellaneous Items:** • Mounting blocks • Screws • Cable ties • Pens/pencils • AS/CA S009:2020 • AS/CA S008:2020
	MICROCONTROLLER UNITS	
		Equipment • 8085 Microcontroller trainer • Educational Robot Motor Kit • DSP Teaching Experimental Box Materials • 4 mm^2 connecting leads

		• Multimeter **Miscellaneous Items:** • Colour pens/pencil • Ruler

	MATERIALS MANAGEMENT UNITS	
		Manufacturer catalogues Excel software to prepare the bills and quantity
	REPORT WRITING UNITS	
		Computer and Internet Writing equipment pencil , paper , pen
	WHS POLICIES	
	UETDREL005 Work safely in the vicinity of live electrical apparatus	Computer and Internet Writing equipment pencil , paper , pen
	COMPETENCY DEVELOPMENT UNITS	
		Computer and Internet Writing equipment pencil , paper , pen
	PROJECT UNITS	
	UETDRDS028 Prepare and manage construction plans for electrical infrastructure	Manufacturer catalogues Design drawings of various projects NSW Electrical Service rules AS3000 AS3008 Electrical Contracting textbook Excel software to prepare the bills and quantity
	RENEWABLE ENERGY UNITS	
		RE Design System Books Equipment Setup photos System simulation software Solar system mini model Computer and Internet

		Writing equipment pencil , paper , pen
	ELECTRICAL POWER SYSTEM UNITS	
	UETDRDS015 Assess distributed energy resource connections to a distribution network UETDRDS017 Design customer substations UETDRDS018 Design distribution protection systems UETDRDS019 Design distribution substations UETDRDS020 Design overhead distribution systems 7/ UETDRDS022 Design underground distribution system	Power circuit testing system equipment setup photos Power system operation videos Power system protection videos Power line design programs Power system testing equipment procedures and photos Heavy power equipment setup photos/ simulation practical/Excel graphing programs sheets

For the equipment for the following units, please refer UEE30820 Materials and Equipment List

- UEECD0007 Apply work health and safety regulations, codes and practices in the workplace
- UEECD0044 Solve problems in multiple path circuits
- UEECD0046 Solve problems in single path circuits
- UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications
- UEEEL0020 Solve problems in low voltage a.c. circuits
- UEEEL0021 Solve problems in magnetic and electromagnetic devices

Electrical Diploma Practical

http://www.mongroupsydney1.com/Practical.zip

Electrical Diploma Practical Equipment

www.iqytechnicalcollege.com/Practical Equipments.pdf

PLC Equipment

PLC Hardware Notes 1

www.iqytechnicalcollege.com/PLC Hardware Notes 1.pdf

PLC Hardware Notes 2

www.iqytechnicalcollege.com/PLC Hardware Notes 2.pdf

PLC Hardware Notes 3

www.iqytechnicalcollege.com/PLC Hardware Notes 3.pdf

PLC Hardware Notes 4

www.iqytechnicalcollege.com/PLC Hardware Notes 4.pdf

PLC Hardware Notes 5

www.iqytechnicalcollege.com/PLC Hardware Notes 5.pdf

PLC Hardware Notes 6

www.iqytechnicalcollege.com/PLC Hardware Notes 6.pdf

Control Circuit Boards

www.iqytechnicalcollege.com/Control Circuit Boards.pdf

Process Control Equipment Setup 1

www.iqytechnicalcollege.com/Process Control Equipment Setup 1.pdf

Process Control Equipment Setup 2

www.iqytechnicalcollege.com/Process Control Equipment Setup 2.pdf