



Superseded and deleted UEE11 R1.5 units of competency approved for an extended transition period until 5 October 2022

	Unit of competency code and title
1.	UEENEEA101A- Assemble electronic components
2.	UEENEEA102A- Select electronic components for assembly
3.	UEENEEA103A- Set up and check electronic component assembly machines
4.	UEENEEA104A- Modify electronic sub assemblies
5.	UEENEEA105A- Conduct quality and functional tests on assembled electronic apparatus
6.	UEENEEA106A- Use lead-free soldering techniques
7.	UEENEEA107A- Make up wiring looms for internal wiring of appliances and machinery
8.	UEENEEA110A- Assemble, mount and connect control gear and switchgear
9.	UEENEEA112A- Fabricate and assemble bus bars
10.	UEENEEA113A- Mount and wire control panel equipment
11.	UEENEEB101A- Operate and maintain amateur radio communication stations
12.	UEENEEC001B- Maintain documentation
13.	UEENEEC002B- Source and purchase material/parts for installation or service jobs
14.	UEENEEC003B- Provide quotations for installation or service jobs
15.	UEENEEC004B- Prepare specifications for the supply of materials and equipment for electrotechnology projects
16.	UEENEEC005B- Estimate electrotechnology projects
17.	UEENEEC006B- Prepare tender submissions for electrotechnology projects
18.	UEENEEC007B- Manage contract variations
19.	UEENEEC008B- Receive and store materials and equipment for electrotechnology work
20.	UEENEEC009B- Provide quotations for inspection and compliance audit services
21.	UEENEEC010B- Deliver a service to customers
22.	UEENEEC012B- Direct technical and non-technical enquiries to appropriate personnel
23.	UEENEEC013B- Participate in business equipment work and competency development activities
24.	UEENEEC014B- Participate in computer equipment work and competency development activities
25.	UEENEEC016B- Participate in voice and data communications work and competency development activities
26.	UEENEEC017B- Participate in appliance servicing work and competency development activities
27.	UEENEEC018B- Participate in electrical machine repair work and competency development activities
28.	UEENEEC019B- Participate in switchgear and controlgear work and competency development activities
29.	UEENEEC020B- Participate in electrical work and competency development activities

30.	UEENEEC021B- Participate in electronics and communications work and competency development activities
31.	UEENEEC022B- Participate in fire protection control work and competency development activities
32.	UEENEEC023B- Participate in gaming electronic work and competency development activities
33.	UEENEEC024B- Participate in instrumentation and control work and competency development activities
34.	UEENEEC025B- Participate in refrigeration and air conditioning work and competency development activities
35.	UEENEEC026B- Participate in security equipment work and competency development activities
36.	UEENEEC027B- Participate in rail communications and networks work and competency development activities
37.	UEENEED101A- Use computer applications relevant to a workplace
38.	UEENEED102A- Assemble, set-up and test computing devices
39.	UEENEED103A- Evaluate and modify object oriented code programs
40.	UEENEED104A- Use engineering applications software on personal computers
41.	UEENEED110A- Set up, create and implement content for a web server
42.	UEENEED111A- Develop, implement and test object oriented code
43.	UEENEED112A- Support computer hardware and software for engineering applications
44.	UEENEED113A- Install and administer Unix based networked computers
45.	UEENEED114A- Design and manage enterprise computer networks
46.	UEENEED115A- Administer computer networks
47.	UEENEED116A- Develop computer network services
48.	UEENEED117A- Install and configure network systems for internetworking
49.	UEENEED118A- Design and implement network systems for internetworking
50.	UEENEED119A- Design and implement advanced routing for internetworking systems
51.	UEENEED120A- Design and implement remote access for Internetworking systems
52.	UEENEED121A- Design and implement multi-layer switching for Internetworking systems
53.	UEENEED122A- Design and implement security for Internetworking systems
54.	UEENEED123A- Design and implement wireless LANs/WANs for internetworking systems
55.	UEENEED124A- Integrate multiple computer operating systems on a client server local area network
56.	UEENEED129A- Develop web pages for engineering applications
57.	UEENEED130A- Select, install, configure and test multimedia components
58.	UEENEED143A- Install and configure a client computer operating system and software
59.	UEENEED144A- Commission industrial computer systems
60.	UEENEED145A- Modify-redesign of industrial computer systems
61.	UEENEED146A- Set up and configure basic local area network (LAN)
62.	UEENEED147A- Develop energy sector directory services
63.	UEENEED148A- Plan industrial computer systems projects
64.	UEENEED149A- Develop energy sector computer network applications infrastructure

65.	UEENEED150A- Develop industrial control programs for microcomputer equipped devices
66.	UEENEED151A- Provide programming solution for computer systems engineering problems
67.	UEENEED152A- Design embedded controller control systems
68.	UEENEED153A- Set up, configure and test biometric devices
69.	UEENEED154A- Analyse and implement biometric measuring techniques and applications
70.	UEENEED155A- Develop and validate biometric equipment/systems installation
71.	UEENEEE006B- Apply methods to maintain currency of industry developments
72.	UEENEEE009B- Comply with scheduled and preventative maintenance program processes
73.	UEENEEE011C- Manage risk in electrotechnology activities
74.	UEENEEE012B- Manage electrotechnology projects
75.	UEENEEE013B- Plan electrotechnology projects
76.	UEENEEE015B- Develop design briefs for electrotechnology projects
77.	UEENEEE020B- Provide basic instruction in the use of electrotechnology apparatus
78.	UEENEEE038B- Participate in development and follow a personal competency development plan
79.	UEENEEE070B- Write specifications for computer systems engineering projects
80.	UEENEEE071B- Write specifications for electrical engineering projects
81.	UEENEEE072B- Write specifications for electronics and communications engineering projects
82.	UEENEEE073B- Write specifications for refrigeration and air conditioning engineering projects
83.	UEENEEE074B- Write specifications for renewable energy engineering projects
84.	UEENEEE075B- Write specifications for industrial electronics and control projects
85.	UEENEEE077B- Write specifications for automated systems projects
86.	UEENEEE078B- Contribute to risk management in electrotechnology systems
87.	UEENEEE080A- Apply industry and community standards to engineering activities
88.	UEENEEE081A- Apply material science to solving electrotechnology engineering problems
89.	UEENEEE082A- Apply physics to solving electrotechnology engineering problems
90.	UEENEEE083A- Establish and follow a competency development plan in an electrotechnology engineering discipline
91.	UEENEEE084A- Write specifications for electrotechnology engineering projects
92.	UEENEEE101A- Apply Occupational Health and Safety regulations, codes and practices in the workplace
93.	UEENEEE102A- Fabricate, assemble and dismantle utilities industry components
94.	UEENEEE103A- Solve problems in ELV single path circuits
95.	UEENEEE104A- Solve problems in d.c. circuits
96.	UEENEEE105A- Fix and secure electrotechnology equipment
97.	UEENEEE107A- Use drawings, diagrams, schedules, standards, codes and specifications
98.	UEENEEE108A- Lay wiring/cabling and terminate accessories for extra-low voltage (ELV) circuits

99.	UEENEEE110A- Develop and implement energy sector maintenance programs
100.	UEENEEE114A- Supervise and coordinate energy sector work activities
101.	UEENEEE117A- Implement and monitor energy sector OHS policies and procedures
102.	UEENEEE118A- Establish, maintain and evaluate energy sector OHS systems
103.	UEENEEE119A- Solve problems in multiple path extra low voltage (ELV) a.c. circuits
104.	UEENEEE121A- Plan an integrated cabling installation system
105.	UEENEEE122A- Carry out preparatory energy sector work activities
106.	UEENEEE123A- Solve basic problems electronic and digital equipment and circuits
107.	UEENEEE124A- Compile and produce an energy sector detailed report
108.	UEENEEE125A- Provide engineering solutions for problems in complex multiple path circuits
109.	UEENEEE126A- Provide solutions to basic engineering computational problems
110.	UEENEEE127A- Use advanced computational processes to provide solutions to energy sector engineering problems
111.	UEENEEE128A- Develop engineering solutions to photonic system problems
112.	UEENEEE129A- Solve electrotechnical engineering problems
113.	UEENEEE130A- Provide solutions and report on routine electrotechnology problems
114.	UEENEEE131A- Solve problems in ELV circuits for non electrical workers
115.	UEENEEE137A- Document and apply measures to control OHS risks associated with electrotechnology work
116.	UEENEEE141A- Use of routine equipment/plant/technologies in an energy sector environment
117.	UEENEEE142A- Produce products for carrying out energy sector work activities
118.	UEENEEE143A- Produce routine tools/devices for carrying out energy sector work activities
119.	UEENEEE144A- Apply technologies and concepts to energy sector work activities
120.	UEENEEE145A- Apply computation when using equipment/materials/concepts in an energy sector environment
121.	UEENEEE146A- Identify effects of energy on machinery and materials in an energy sector environment
122.	UEENEEE147A- Identify building techniques, methods and materials used in energy sector work activities
123.	UEENEEE148A- Carry out routine work activities in an energy sector environment
124.	UEENEEE149A- Contribute to the operation of support plant and equipment used in electricity supply industry
125.	UEENEEE150A- Undertake computations in an energy sector environment
126.	UEENEEE151A- Transport apparatus, equipment and materials
127.	UEENEEE152A- Observe safety practices are followed in the vicinity of isolated electrical cables
128.	UEENEEE160A- Provide engineering solutions for uses of materials and thermodynamic effects
129.	UEENEEE161A- Analyse static and dynamic parameters of electrical equipment
130.	UEENEEE162A- Select drive components for electrical equipment design
131.	UEENEEE163A- Analyse materials for suitability in electrical equipment

132.	UEENEEE164A- Design electrical machine drives and production layout plans
133.	UEENEEE179A- Identify and select components, accessories and materials for energy sector work activities
134.	UEENEEE185A- Write work activity reports
135.	UEENEEE190A- Prepare engineering drawings using manual drafting and CAD for electrotechnology/utilities applications
136.	UEENEEE191A- Prepare electrotechnology/utilities drawings using manual drafting and CAD equipment and software
137.	UEENEEE192A- Produce detailed electrotechnology /utilities drawings using computer aided design equipment and software
138.	UEENEEF101A- Install and connect cabling for direct access to telecommunications service
139.	UEENEEF102A- Install and maintain cabling for multiple access to telecommunication services
140.	UEENEEF103A- Install and maintain telecommunication cabling for services in lifts
141.	UEENEEF104A- Install and modify performance data communication copper cabling
142.	UEENEEF105A- Install and modify optical fibre performance data communication cabling
143.	UEENEEF106A- Solve problems in voice and data communications circuits
144.	UEENEEF107A- Set up and configure the wireless capabilities of communications and data storage devices
145.	UEENEEF108A- Select and arrange equipment for wireless communication networks
146.	UEENEEF109A- Install and connect data and voice communication equipment
147.	UEENEEF110A- Select and arrange data and voice equipment for local area networks
148.	UEENEEF111A- Test, report and rectify faults in data and voice installations
149.	UEENEEF112A- Install aerial telecommunication cables
150.	UEENEEF113A- Install underground communication cables
151.	UEENEEF114A- Set up and configure basic data communication systems
152.	UEENEEF115A- Assemble and connect telecommunication frames and cabinets
153.	UEENEEG006A- Solve problems in single and three phase low voltage machines
154.	UEENEEG033A- Solve problems in single and three phase low voltage electrical apparatus and circuits
155.	UEENEEG063A- Arrange circuits, control and protection for general electrical installations
156.	UEENEEG076A- Install and replace low voltage current transformer metering
157.	UEENEEG101A- Solve problems in electromagnetic devices and related circuits
158.	UEENEEG102A- Solve problems in low voltage a.c. circuits
159.	UEENEEG103A- Install low voltage wiring and accessories
160.	UEENEEG104A- Install appliances, switchgear and associated accessories for low voltage electrical installations
161.	UEENEEG105A- Verify compliance and functionality of low voltage general electrical installations
162.	UEENEEG106A- Terminate cables, cords and accessories for low voltage circuits
163.	UEENEEG107A- Select wiring systems and cables for low voltage general electrical installations

164.	UEENEEG108A- Trouble-shoot and repair faults in low voltage electrical apparatus and circuits
165.	UEENEEG109A- Develop and connect electrical control circuits
166.	UEENEEG110A- Find and repair faults in LV d.c. electrical apparatus and circuits
167.	UEENEEG111A- Carry out basic repairs to electrical components and equipment
168.	UEENEEG113A- Install and maintain emergency safety systems
169.	UEENEEG116A- Diagnose and rectify faults in traction lift systems
170.	UEENEEG118A- Maintain operation of electrical mining equipment and systems
171.	UEENEEG119A- Maintain operation of electrical marine equipment and systems
172.	UEENEEG120A- Select and arrange equipment for special LV electrical installations
173.	UEENEEG121A- Verify compliance and functionality of special LV electrical installations
174.	UEENEEG122A- Conduct compliance inspection of single phase LV electrical installations
175.	UEENEEG123A- Conduct compliance inspection of LV electrical installations with demand exceeding 100 A per phase
176.	UEENEEG124A- Conduct compliance inspection of special LV electrical installations
177.	UEENEEG125A- Plan electrical installations with a low voltage demand up to 400 A per phase
178.	UEENEEG126A- Install and maintain field power and distribution systems with a low voltage demand up to 200 A per phase
179.	UEENEEG127A- Design electrical installations with a low voltage demand greater than 400 A per phase
180.	UEENEEG128A- Plan low voltage switchboard and control panel layouts
181.	UEENEEG129A- Overhaul and repair major switchgear and controlgear
182.	UEENEEG130A- Design switchboards rated for high fault levels (greater than 400 A)
183.	UEENEEG131A- Evaluate performance of low voltage electrical apparatus
184.	UEENEEG132A- Carry out low voltage electrical field testing and report findings
185.	UEENEEG143A- Develop engineering solution for synchronous machine and control problems
186.	UEENEEG144A- Develop engineering solutions for d.c. machine and control problems
187.	UEENEEG145A- Develop engineering solutions for induction machine and control problems
188.	UEENEEG149A- Provide engineering solutions to problems in complex polyphase power circuits
189.	UEENEEG150A- Wind electrical coils
190.	UEENEEG151A- Place and connect electrical coils
191.	UEENEEG152A- Rewind single phase machines
192.	UEENEEG153A- Rewind three phase low voltage induction machines
193.	UEENEEG154A- Rewind LV direct current machines
194.	UEENEEG155A- Rewind HV three phase induction machines rated for voltages to 3.3 kV
195.	UEENEEG156A- Rewind HV three phase induction machines rated for voltages above 3.3 kV
196.	UEENEEG157A- Conduct electrical tests on LV electrical machines
197.	UEENEEG158A- Conduct electrical tests on HV electrical machines

198.	UEENEEG159A- Conduct mechanical tests on electrical machines and components
199.	UEENEEG160A- Evaluate performance of LV electrical machines
200.	UEENEEG161A- Design and develop modifications to LV electrical machines
201.	UEENEEG162A- Set up and place LV electrical apparatus and associated circuits into service
202.	UEENEEG164A- Repair and maintain mechanical components of electrical machines
203.	UEENEEG165A- Maintain and service traction lifts systems and equipment
204.	UEENEEG166A- Install and maintain escalators, moving walks and treadways
205.	UEENEEG167A- Align and install traction lift equipment
206.	UEENEEG168A- Diagnose and rectify faults in complex lift systems
207.	UEENEEG169A- Manage large electrical projects
208.	UEENEEG170A- Plan large electrical projects
209.	UEENEEG171A- Install, set up and commission interval metering
210.	UEENEEG172A- Investigate and report on electrical incidents and causes
211.	UEENEEG175A- Develop compliance policies and plans to conduct a electrical contracting business
212.	UEENEEG177A- Select low voltage power factor correction equipment
213.	UEENEEG179A- Develop detailed electrical drawings
214.	UEENEEG180A- Develop detailed and complex drawings for electrical systems using CAD systems
215.	UEENEEG181A- Provide advice on effective and energy efficient lighting products
216.	UEENEEG182A- Supply effective and efficient lighting products for domestic and small commercial applications
217.	UEENEEG183A- Provide advice on the application of energy efficient lighting for ambient and aesthetic effect
218.	UEENEEG184A- Provide photometric data for illumination system design
219.	UEENEEG185A- Select effective and efficient light sources and luminaries for given locations and designs
220.	UEENEEG186A- Design effective and efficient lighting for residential and commercial buildings
221.	UEENEEG187A- Design effective and efficient lighting for public, open and sports areas
222.	UEENEEG188A- Prepare quotations for the supply of effective and efficient lighting products for lighting projects
223.	UEENEEG189A- Install and maintain emergency lighting systems
224.	UEENEEG197A- Apply currency of safe working practices and compliance verification of electrical installations
225.	UEENEEG198A- Apply compliance requirements to all aspects of electrical work
226.	UEENEEG199A- Conduct compliance and functional verification of electrical apparatus and existing circuits
227.	UEENEEH101A- Repair basic computer equipment faults by replacement of modules/sub-assemblies
228.	UEENEEH102A- Repairs basic electronic apparatus faults by replacement of components
229.	UEENEEH103A- Repair routine business equipment faults
230.	UEENEEH104A- Set up and test residential video/audio equipment

231.	UEENEEH105A- Verify functionality and compliance of custom electronic installations
232.	UEENEEH106A- Assemble and set up fixed video/audio components and systems in buildings and premises
233.	UEENEEH107A- Repair predictable faults in general electronic apparatus
234.	UEENEEH108A- Assemble and install reception antennae and signal distribution equipment
235.	UEENEEH109A- Set up and test gaming and game equipment
236.	UEENEEH110A- Install commercial video/audio system components
237.	UEENEEH111A- Troubleshoot single phase input d.c. power supplies
238.	UEENEEH112A- Troubleshoot digital sub-systems
239.	UEENEEH113A- Troubleshoot amplifiers in an electronic apparatus
240.	UEENEEH114A- Troubleshoot resonance circuits in an electronic apparatus
241.	UEENEEH115A- Develop software solutions for microcontroller based systems
242.	UEENEEH116A- Find and repair microwave amplifier section faults in electronic apparatus
243.	UEENEEH117A- Carry out repairs of predictable faults in video and audio replay/recording apparatus
244.	UEENEEH118A- Fault find and repair electronic apparatus
245.	UEENEEH119A- Repair predictable faults in television receivers
246.	UEENEEH120A- Fault find and repair gaming and games equipment
247.	UEENEEH121A- Fault find and repair high volume office equipment
248.	UEENEEH122A- Fault find and repair remote control apparatus
249.	UEENEEH123A- Fault find and repair microwave heating apparatus
250.	UEENEEH124A- Repair predictable faults in audio components
251.	UEENEEH127A- Set up and adjust commercial radio frequency (RF) transmission and reception systems
252.	UEENEEH128A- Install and test microwave antennae and waveguides
253.	UEENEEH129A- Fault find and repair navigation systems
254.	UEENEEH130A- Fault find and repair satellite-based surveillance and observation systems
255.	UEENEEH131A- Fault find and repair radar apparatus and systems
256.	UEENEEH132A- Fault find and repair global positioning systems
257.	UEENEEH133A- Fault find and repair telecommunication apparatus and systems
258.	UEENEEH134A- Fault find and repair electronic medical equipment
259.	UEENEEH135A- Design custom electronic equipment installations
260.	UEENEEH136A- Design commercial video/audio installations
261.	UEENEEH137A- Program and commission commercial video/audio systems
262.	UEENEEH138A- Fault find and repair complex power supplies
263.	UEENEEH139A- Troubleshoot basic amplifier circuits
264.	UEENEEH140A- Fault find and repair sonar apparatus and systems
265.	UEENEEH141A- Manage computer systems/electronics projects
266.	UEENEEH142A- Solve oscillator problems

267.	UEENEEH145A- Develop engineering solutions to analogue electronic problems
268.	UEENEEH146A- Solve fundamental electronic communications system problems
269.	UEENEEH147A- Assess electronic apparatus compliance
270.	UEENEEH148A- Design and develop advanced digital systems
271.	UEENEEH149A- Develop engineering solutions to audio electronic problems
272.	UEENEEH150A- Assemble and set up basic security systems
273.	UEENEEH151A- Install large security systems
274.	UEENEEH152A- Enter instructions and test wired and wireless security systems
275.	UEENEEH153A- Program and test large security systems
276.	UEENEEH154A- Program and commission commercial security systems
277.	UEENEEH155A- Program and commission commercial access control security systems
278.	UEENEEH156A- Program and commission commercial security closed circuit television systems
279.	UEENEEH157A- Develop basic plans for integrating security systems
280.	UEENEEH158A- Design integrated security systems
281.	UEENEEH159A- Design integrated complex security systems for multiple sites
282.	UEENEEH160A- Plan large electronic projects
283.	UEENEEH161A- Install fire detection and warning system apparatus
284.	UEENEEH162A- Verify compliance and functionality of fire protection system installations
285.	UEENEEH163A- Enter and verify programs for fire protection systems
286.	UEENEEH164A- Commission large fire protection systems
287.	UEENEEH165A- Troubleshoot fire protection systems
288.	UEENEEH166A- Troubleshoot microcontroller based hardware systems
289.	UEENEEH167A- Commission electronics and communications systems
290.	UEENEEH168A- Modify - redesign of electronics and communications systems
291.	UEENEEH169A- Solve problems in basic electronic circuits
292.	UEENEEH171A- Troubleshoot faults in television receivers
293.	UEENEEH172A- Troubleshoot communication systems
294.	UEENEEH173A- Troubleshoot professional audio reproduction components
295.	UEENEEH174A- Troubleshoot audio - video recording equipment
296.	UEENEEH175A- Troubleshooting in security system installations
297.	UEENEEH176A- Diagnose and rectify faults in electronic display circuits
298.	UEENEEH177A- Diagnose and rectify faults in recording and replay equipment
299.	UEENEEH178A- Diagnose and rectify faults in camera circuits and equipment
300.	UEENEEH179A- Diagnose and rectify faults in digital television circuits and apparatus
301.	UEENEEH180A- Diagnose and rectify faults in digital transmission circuits and systems
302.	UEENEEH181A- Design electronic printed circuit boards
303.	UEENEEH182A- Develop engineering solutions to RF amplifiers problems
304.	UEENEEH183A- Analyse the performance of wireless-based electronic - communication systems
305.	UEENEEH184A- Modify digital signal processing (DSP) based sub-systems

306.	UEENEEH185A- Design signal-conditioning subsystems
307.	UEENEEH186A- Commission satellite and microwave communication systems
308.	UEENEEH187A- Solve problems in electronic musical equipment circuits
309.	UEENEEH188A- Design and develop electronics - computer systems projects
310.	UEENEEH189A- Provide Gate Array solutions for complex electronics systems
311.	UEENEEH190A- Provide engineering solutions to air traffic control system problems
312.	UEENEEH191A- Diagnose and rectify faults in air navigation circuits and systems
313.	UEENEEH192A- Develop solutions for air surveillance apparatus and systems
314.	UEENEEI101A- Use instrumentation drawings, specification, standards and equipment manuals
315.	UEENEEI102A- Solve problems in pressure measurement components and systems
316.	UEENEEI103A- Solve problems in density/level measurement components and systems
317.	UEENEEI104A- Solve problems in flow measurement components and systems
318.	UEENEEI105A- Solve problems in temperature measurement components and systems
319.	UEENEEI106A- Set up and adjust PID control loops
320.	UEENEEI107A- Install instrumentation and control cabling and tubing
321.	UEENEEI108A- Install instrumentation and control apparatus and associated equipment
322.	UEENEEI110A- Set up and adjust advanced PID process control loops
323.	UEENEEI111A- Find and rectify faults in process final control elements
324.	UEENEEI112A- Verify compliance and functionality of instrumentation and control installations
325.	UEENEEI113A- Setup and configure Human-Machine Interface (HMI) and industrial networks
326.	UEENEEI114A- Trouble shoot process control systems
327.	UEENEEI115A- Trouble shooting in medical equipment control systems
328.	UEENEEI116A- Assemble, enter and verify operating instructions in microprocessor equipped devices
329.	UEENEEI117A- Calibrate, adjust and test measuring instruments
330.	UEENEEI118A- Set up weighting measuring and control instruments
331.	UEENEEI119A- Set up industrial field control devices
332.	UEENEEI120A- Provide solutions to problems in industrial control systems
333.	UEENEEI121A- Trouble shoot in measuring and analysis systems
334.	UEENEEI122A- Assist in commissioning process and instrumentation control systems
335.	UEENEEI123A- Design electronic control systems
336.	UEENEEI124A- Fault find and repair analogue circuits and components in electronic control systems
337.	UEENEEI125A- Provide solutions to fluid circuit operations
338.	UEENEEI126A- Provide solutions to pneumatic-hydraulic system operations
339.	UEENEEI127A- Analyse complex electronic circuits controlling fluids
340.	UEENEEI128A- Set up and configure controls on complex fluid systems
341.	UEENEEI129A- Set up electronically controlled mechanically operated complex systems
342.	UEENEEI130A- Set up electronically controlled robotically operated complex systems

343.	UEENEEI131A- Set up gas analysis measuring and control instruments
344.	UEENEEI132A- Set up water analysis measuring and control instruments
345.	UEENEEI133A- Set up scientific analysis measuring and control instruments
346.	UEENEEI134A- Manage instrumentation and control projects
347.	UEENEEI135A- Plan instrumentation and control projects
348.	UEENEEI136A- Manage automated control systems projects
349.	UEENEEI137A- Plan automated and control systems projects
350.	UEENEEI138A- Provide solutions to extra low voltage (ELV) electro-pneumatic control systems and drives
351.	UEENEEI139A- Diagnose and rectify faults in digital controls systems
352.	UEENEEI140A- Plan the electrical installation of integrated systems
353.	UEENEEI141A- Develop electrical integrated systems
354.	UEENEEI142A- Develop an electrical integrated system interface for access through a touch screen
355.	UEENEEI143A- Develop access control of electrical integrated systems using logic-based programming tools
356.	UEENEEI144A- Develop interfaces for multiple access methods to monitor, schedule and control an electrical integrated system
357.	UEENEEI145A- Diagnose and rectify faults in a.c. motor drive systems
358.	UEENEEI146A- Diagnose and rectify faults in d.c. motor drive systems
359.	UEENEEI147A- Diagnose and rectify faults in servo drive systems
360.	UEENEEI148A- Solve problems in single phase electronic power control circuits
361.	UEENEEI149A- Solve problems in polyphase electronic power control circuits
362.	UEENEEI150A- Develop, enter and verify discrete control programs for programmable controllers
363.	UEENEEI151A- Develop, enter and verify word and analogue control programs for programmable logic controllers
364.	UEENEEI152A- Develop, enter and verify programs in Supervisory Control and Data Acquisition systems
365.	UEENEEI153A- Design and configure Human-Machine Interface (HMI) networks
366.	UEENEEI154A- Design and use advanced programming tools PC networks and HMI Interfacing
367.	UEENEEI155A- Develop structured programs to control external devices
368.	UEENEEI156A- Develop and test code for microcontroller devices
369.	UEENEEI157A- Configure and maintain industrial control system networks
370.	UEENEEJ040B- Manage refrigeration and air conditioning projects
371.	UEENEEJ069B- Plan refrigeration and air conditioning projects
372.	UEENEEJ102A- Prepare and connect refrigerant tubing and fittings
373.	UEENEEJ103A- Establish the basic operating conditions of vapour compression systems
374.	UEENEEJ104A- Establish the basic operating conditions of air conditioning systems
375.	UEENEEJ105A- Position, assemble and start up single head split air conditioning and water heating heat pump systems
376.	UEENEEJ106A- Install refrigerant pipe work, flow controls and accessories

377.	UEENEEJ107A- Install air conditioning and refrigeration systems, major components and associated equipment
378.	UEENEEJ108A- Recover, pressure test, evacuate, charge and leak test refrigerants
379.	UEENEEJ109A- Verify functionality and compliance of refrigeration and air conditioning installations
380.	UEENEEJ110A- Select refrigerant piping, accessories and associated controls
381.	UEENEEJ111A- Diagnose and rectify faults in air conditioning and refrigeration systems and components
382.	UEENEEJ112A- Diagnose and rectify faults in complex air conditioning/ refrigeration systems
383.	UEENEEJ113A- Commission air conditioning and refrigeration systems
384.	UEENEEJ114A- Resolve problems in hydronic systems
385.	UEENEEJ115A- Resolve problems in beverage dispensers
386.	UEENEEJ116A- Resolve problems in transport refrigeration systems
387.	UEENEEJ117A- Resolve problems in ultra-low temperature refrigeration systems
388.	UEENEEJ118A- Resolve problems in post mix refrigeration systems
389.	UEENEEJ119A- Resolve problems in ice making systems
390.	UEENEEJ120A- Resolve problems in industrial refrigeration systems
391.	UEENEEJ121A- Monitor and adjust refrigeration energy management systems
392.	UEENEEJ122A- Diagnose faults in complex HVAC /refrigeration control systems
393.	UEENEEJ123A- Commission complex (HVAC) heating, ventilation and air conditioning systems
394.	UEENEEJ124A- Commission refrigeration/ air conditioning hydronic systems
395.	UEENEEJ125A- Commission complex refrigeration systems and equipment
396.	UEENEEJ126A- Commission complex refrigeration/air conditioning control systems
397.	UEENEEJ127A- Establish the thermodynamic parameters of refrigeration and air conditioning systems
398.	UEENEEJ128A- Produce HVAC/R system design drawings
399.	UEENEEJ129A- Establish heat loads for commercial refrigeration and/or air conditioning applications
400.	UEENEEJ130A- Produce HVAC/R control system diagrams
401.	UEENEEJ131A- Determine noise and vibration encountered in HVAC/R applications
402.	UEENEEJ132A- Design commercial refrigeration systems and select components
403.	UEENEEJ133A- Design industrial refrigeration systems and select components
404.	UEENEEJ134A- Design heating, ventilation and air conditioning (HVAC) systems and select components
405.	UEENEEJ135A- Design control systems for refrigeration or heating, ventilation and air conditioning systems
406.	UEENEEJ136A- Evaluate and report on building services energy management systems
407.	UEENEEJ137A- Evaluate and report on the indoor air quality of buildings
408.	UEENEEJ138A- Analyse vibration and noise in refrigeration and air conditioning systems
409.	UEENEEJ139A- Develop specifications and prepare drawings for HVAC/Refrigeration projects
410.	UEENEEJ141A- Design complex commercial refrigeration systems and select equipment

411.	UEENEEJ142A- Design complex industrial refrigeration systems and select equipment
412.	UEENEEJ143A- Design complex air conditioning systems and select equipment
413.	UEENEEJ144A- Design mechanical ventilation/exhaust systems and select equipment
414.	UEENEEJ145A- Design hydronic systems and select equipment
415.	UEENEEJ146A- Design complex control systems for refrigeration or heating, ventilation, air conditioning systems
416.	UEENEEJ147A- Audit energy use for commercial HVAC/Refrigeration systems
417.	UEENEEJ148A- Audit HVAC/R control systems for compliance with regulations and standards
418.	UEENEEJ149A- Develop heat exchanger design specifications
419.	UEENEEJ150A- Evaluate new and alternative technologies applicable to electrotechnology applications
420.	UEENEEJ151A- Service small electrical appliances and power tools
421.	UEENEEJ153A- Find and rectify faults in motors and associated controls in refrigeration and air conditioning systems
422.	UEENEEJ154A- Find and rectify faults in appliance control systems and devices
423.	UEENEEJ155A- Service refrigeration appliances
424.	UEENEEJ156A- Service clothes washing machines and dryers
425.	UEENEEJ157A- Service electrical heating appliances
426.	UEENEEJ158A- Service dishwasher machines
427.	UEENEEJ159A- Service gas heating appliances
428.	UEENEEJ161A- Verify functionality and compliance of appliances
429.	UEENEEJ162A- Recover, pressure test, evacuate, charge and leak test refrigerants - appliances
430.	UEENEEJ164A- Analyse the operation of HVAC air and hydronic systems
431.	UEENEEJ165A- Evaluate thermodynamic and fluid parameters of refrigeration systems
432.	UEENEEJ166A- Resolve problems in dairy refrigeration systems
433.	UEENEEJ167A- Resolve problems in central plant air conditioning systems
434.	UEENEEJ168A- Maintain microbial control of refrigeration and air conditioning systems
435.	UEENEEJ170A- Diagnose and rectify faults in air conditioning and refrigeration control systems
436.	UEENEEJ171A- Resolve problems in refrigerated beverage vending cabinets
437.	UEENEEJ172A- Recover, pressure test, evacuate, charge and leak test refrigerants - split systems
438.	UEENEEJ173A- Service and repair microwave ovens
439.	UEENEEJ174A- Apply safety awareness and legal requirements for hydrocarbon refrigerants
440.	UEENEEJ175A- Service and repair self contained hydrocarbon air conditioning and refrigeration systems
441.	UEENEEJ176A- Install and commission hydrocarbon refrigeration systems, components and associated equipment
442.	UEENEEJ177A- Design hydrocarbon refrigerated systems
443.	UEENEEJ178A- Apply safety awareness and legal requirements for ammonia refrigerant

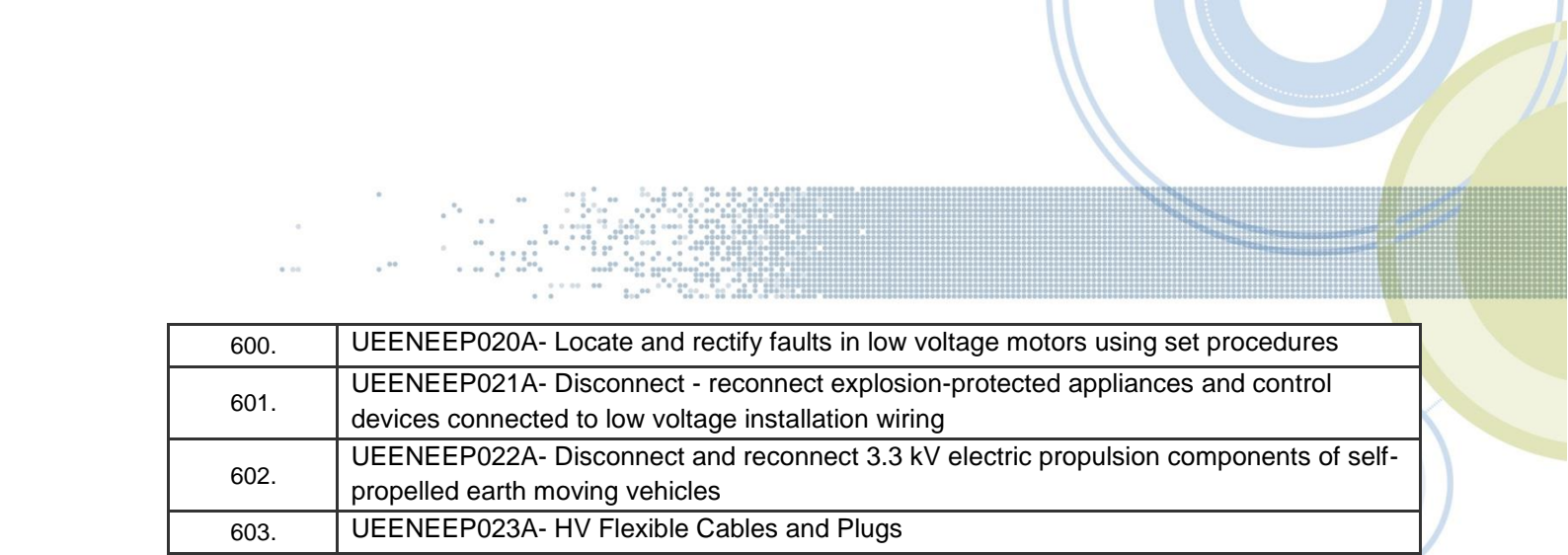
444.	UEENEEJ179A- Repair and service ammonia refrigeration systems
445.	UEENEEJ180A- Install and commission ammonia refrigeration systems, components and associated equipment
446.	UEENEEJ181A- Design ammonia refrigerated systems
447.	UEENEEJ182A- Repair and service secondary refrigeration systems
448.	UEENEEJ183A- Design secondary refrigerant systems
449.	UEENEEJ184A- Apply safety awareness and legal requirements for carbon dioxide refrigerant
450.	UEENEEJ185A- Repair and service carbon dioxide refrigeration systems
451.	UEENEEJ186A- Install and commission carbon dioxide refrigeration systems, components and associated equipment
452.	UEENEEJ187A- Design carbon dioxide refrigerated systems
453.	UEENEEJ188A- Repair and service self contained carbon dioxide refrigeration and heat pump systems
454.	UEENEEJ189A- Service room air conditioners
455.	UEENEEJ190A- Select basic commercial refrigeration system equipment, components and accessories
456.	UEENEEJ191A- Select residential air conditioning system equipment, components and accessories
457.	UEENEEJ192A- Analyse the psychrometric performance of HVAC/R systems
458.	UEENEEJ193A- Analyse the thermodynamic performance of HVAC/R systems
459.	UEENEEJ194A- Solve problems in low voltage refrigeration circuits
460.	UEENEEJ195A- Establish the basic operating conditions of vapour compression systems - appliances
461.	UEENEEJ196A- Operate Ammonia Refrigeration Plant
462.	UEENEEK101A- Maintain safety and tidiness of remote area power supply systems
463.	UEENEEK102A- Work safely with remote area power supply systems
464.	UEENEEK103A- Conduct periodic maintenance of remote area power supply battery banks
465.	UEENEEK104A- Conduct periodic maintenance of remote area power supply generator sets
466.	UEENEEK105A- Conduct periodic maintenance of remote area power supply photo voltaic arrays
467.	UEENEEK106A- Conduct periodic maintenance of remote area power supply wind generators
468.	UEENEEK107A- Conduct checks in the demand side use of remote area power supplies (RAPS)
469.	UEENEEK108A- Plan periodic maintenance schedules of remote area power supplies (RAPS)
470.	UEENEEK109A- Attend to breakdowns in remote area power supplies (RAPS)
471.	UEENEEK110A- Co-ordinate maintenance of renewable energy (RE) apparatus and systems
472.	UEENEEK111A- Assemble and connect remote area power supplies
473.	UEENEEK112A- Provide basic sustainable energy solutions for energy reduction in residential premises

474.	UEENEEK114A- Promote sustainable energy practices in the community
475.	UEENEEK116A- Maintain and repair remote area power generation facilities
476.	UEENEEK117A- Maintain and repair facilities associated with remote area essential service operations
477.	UEENEEK118A- Maintain and monitor remote area essential service (RAPS) operations
478.	UEENEEK120A- Maintain operation of remote area power generation plant
479.	UEENEEK121A- Manage renewable energy (RE) projects
480.	UEENEEK122A- Plan renewable energy (RE) projects
481.	UEENEEK123A- Carry out basic repairs to renewable energy apparatus
482.	UEENEEK124A- Solve basic problems in micro hydro systems
483.	UEENEEK125A- Solve basic problems in photovoltaic energy apparatus and systems
484.	UEENEEK127A- Diagnose and rectify faults in renewable energy control systems
485.	UEENEEK128A- Solve problems in stand-alone renewable energy systems
486.	UEENEEK129A- Design renewable energy (RE) heating systems
487.	UEENEEK130A- Solve problems in wind energy conversion systems rated up to 10 kW
488.	UEENEEK131A- Design wind energy conversion systems (WECS) rated to 10 kW
489.	UEENEEK132A- Develop strategies to address environmental and sustainability issues in the energy sector
490.	UEENEEK133A- Design hybrid renewable power systems
491.	UEENEEK134A- Install ELV stand-alone photovoltaic power systems
492.	UEENEEK135A- Design grid connected photovoltaic power supply systems
493.	UEENEEK136A- Install, configure and commission LV micro-hydro systems rated up to 6.4 kW
494.	UEENEEK137A- Install, set up and maintain ELV micro-hydro systems rated up to 6.4 kW
495.	UEENEEK138A- Design micro-hydro systems rated to 6.4 kW
496.	UEENEEK139A- Design stand-alone renewable energy (RE) systems
497.	UEENEEK140A- Develop engineering solutions to renewable energy (RE) problems
498.	UEENEEK142A- Apply environmentally and sustainable procedures in the energy sector
499.	UEENEEK143A- Install small wind energy conversion systems rated up to 10 kW for ELV stand-alone applications
500.	UEENEEK144A- Install, configure and commission LV wind energy conversion systems rated up to 10 kW
501.	UEENEEK145A- Implement and monitor energy sector environmental and sustainable policies and procedures
502.	UEENEEK146A- Design energy management controls for electrical installations in buildings
503.	UEENEEK148A- Install, configure and commission LV grid connected photovoltaic power systems
504.	UEENEEK149A- Verify compliance and functionality of a extra low voltage renewable energy installation
505.	UEENEEK151A- Develop effective engineering strategies for energy reduction in buildings
506.	UEENEEK152A- Develop strategies to address sustainability issues for electrical installations

507.	UEENEEK153A- Assess energy loads and uses for energy efficiency in residential, office and retail premises
508.	UEENEEK154A- Assess energy loads and uses for energy efficiency in commercial facilities
509.	UEENEEK155A- Assess energy loads and uses for energy efficiency in industrial properties and enterprises
510.	UEENEEM019A- Attend to breakdowns in hazardous areas - coal mining
511.	UEENEEM020A- Attend to breakdowns in hazardous areas - gas atmospheres
512.	UEENEEM021A- Attend to breakdowns in hazardous areas - dust atmospheres
513.	UEENEEM022A- Attend to breakdowns in hazardous areas - pressurisation
514.	UEENEEM023A- Install explosion-protected equipment and wiring systems - coal mining
515.	UEENEEM024A- Install explosion-protected equipment and wiring systems - gas atmospheres
516.	UEENEEM025A- Install explosion-protected equipment and wiring systems - dust atmospheres
517.	UEENEEM026A- Install explosion-protected equipment and wiring systems - pressurisation
518.	UEENEEM027A- Maintain equipment in hazardous areas - coal mining
519.	UEENEEM028A- Maintain equipment in hazardous areas - gas atmospheres
520.	UEENEEM029A- Maintain equipment in hazardous areas - dust atmospheres
521.	UEENEEM030A- Maintain equipment in hazardous areas - pressurisation
522.	UEENEEM031A- Overhaul and repair of explosion-protected equipment - coal mining
523.	UEENEEM032A- Overhaul and repair of explosion-protected equipment - flameproof enclosures
524.	UEENEEM033A- Overhaul and repair of explosion-protected equipment - gas atmospheres
525.	UEENEEM034A- Overhaul and repair of explosion-protected equipment - dust atmospheres
526.	UEENEEM035A- Conduct a conformity assessment of explosion-protected equipment - coal mining
527.	UEENEEM036A- Conduct a conformity assessment of explosion-protected equipment - gas atmospheres
528.	UEENEEM037A- Conduct a conformity assessment of explosion-protected equipment - dust atmospheres
529.	UEENEEM038A- Conduct testing of hazardous areas installations - coal mining
530.	UEENEEM039A- Conduct testing of hazardous areas installations - gas atmospheres
531.	UEENEEM040A- Conduct testing of hazardous areas installations - dust atmospheres
532.	UEENEEM041A- Conduct testing of hazardous area installations - pressurisation
533.	UEENEEM042A- Conduct visual inspection of hazardous areas installations
534.	UEENEEM043A- Conduct detailed inspection of hazardous areas installations - coal mining
535.	UEENEEM044A- Conduct detailed inspection of hazardous areas installations - gas atmospheres
536.	UEENEEM045A- Conduct detailed inspection of hazardous areas installations - dust atmospheres

537.	UEENEEM046A- Conduct detailed inspection of hazardous areas installations - pressurisation
538.	UEENEEM047A- Develop and manage maintenance programs for hazardous areas electrical equipment - coal mining
539.	UEENEEM048A- Develop and manage maintenance programs for hazardous areas electrical equipment - gas atmospheres
540.	UEENEEM049A- Develop and manage maintenance programs for hazardous areas electrical equipment - dust atmospheres
541.	UEENEEM050A- Develop and manage maintenance programs for hazardous areas electrical equipment - pressurisation
542.	UEENEEM052A- Classify hazardous areas - gas atmospheres
543.	UEENEEM053A- Classify hazardous areas - dust atmospheres
544.	UEENEEM054A- Plan electrical installations for hazardous areas - gas atmospheres
545.	UEENEEM055A- Plan electrical installations for hazardous areas - dust atmospheres
546.	UEENEEM056A- Plan electrical installations for hazardous areas - pressurisation
547.	UEENEEM057A- Design explosion-protected electrical systems and installations - gas atmospheres
548.	UEENEEM058A- Design explosion-protected electrical systems and installations - dust atmospheres
549.	UEENEEM059A- Design explosion-protected electrical systems and installations - pressurisation
550.	UEENEEM060A- Carry out overhaul and repair of explosion-protected equipment - coal mining
551.	UEENEEM061A- Carry out overhaul and repair of explosion-protected equipment - flameproof enclosures
552.	UEENEEM062A- Carry out overhaul and repair of explosion-protected equipment - gas atmospheres
553.	UEENEEM063A- Carry out overhaul and repair of explosion-protected equipment - dust atmospheres
554.	UEENEEM064A- Conduct audit of hazardous areas installations - coal mining
555.	UEENEEM065A- Conduct audit of hazardous areas installations - gas atmospheres
556.	UEENEEM066A- Conduct audit of hazardous areas installations - dust atmospheres
557.	UEENEEM067A- Assess the fitness-for-purpose of hazardous areas explosion-protected equipment - coal mining
558.	UEENEEM068A- Assess the fitness-for-purpose of hazardous areas explosion-protected equipment - gas atmospheres
559.	UEENEEM069A- Assess the fitness-for-purpose of hazardous areas explosion-protected equipment - dust atmospheres
560.	UEENEEM070A- Repair reeling, trailing and flexible cables
561.	UEENEEM071A- Test reeling, trailing and flexible cables
562.	UEENEEM072A- Inspect and fit plugs/couplers for reeling, trailing and flexible cables
563.	UEENEEM073A- Verify compliance of repaired reeling, trailing and flexible cables
564.	UEENEEM074A- Plan electrical installations in hazardous areas - Coal mining
565.	UEENEEM075A- Design explosion-protected electrical systems - Coal mining
566.	UEENEEM076A- Use and maintain the integrity of a portable gas detection device

567.	UEENEEM077A- Install and maintain the integrity of fixed gas detection equipment
568.	UEENEEM078A- Manage compliance of hazardous areas
569.	UEENEEM079A- Design of gas detection systems
570.	UEENEEM080A- Report on the integrity of explosion-protected equipment in a hazardous area
571.	UEENEEN101A- Maintain mechanical rail signalling equipment and infrastructure
572.	UEENEEN102A- Assemble and wire internal electrical rail signalling equipment
573.	UEENEEN103A- Install and maintain rail track circuit leads and bonds
574.	UEENEEN104A- Test copper rail signalling cables
575.	UEENEEN105A- Install and maintain rail signalling power supplies
576.	UEENEEN106A- Install and maintain non-vital screen based control systems
577.	UEENEEN107A- Install and maintain active level crossing equipment
578.	UEENEEN108A- Install and maintain power operated point actuating devices
579.	UEENEEN109A- Install and maintain train detection equipment
580.	UEENEEN110A- Install and maintain non-vital telemetry systems
581.	UEENEEN111A- Install and maintain trackside signal and train protection equipment
582.	UEENEEN112A- Install and maintain vital relay interlocking systems
583.	UEENEEN114A- Install and maintain computer based interlocking rail systems
584.	UEENEEN116A- Maintain electronic and microprocessor-based remote control systems
585.	UEENEEN118A- Find and repair rail signalling system faults
586.	UEENEEN121A- Repair rail signalling power and control cables
587.	UEENEEN126A- Develop rail signalling system maintenance programs
588.	UEENEEN127A- Decommission electrical and electro-mechanical rail signalling from service
589.	UEENEEN128A- Test and commission rail power equipment
590.	UEENEENP010A- Disconnect - reconnect appliances connected to low voltage installation wiring
591.	UEENEENP011A- Disconnect - reconnect neon signs connected to low voltage installation wiring
592.	UEENEENP012A- Disconnect / reconnect composite appliances connected to low voltage installation wiring
593.	UEENEENP013A- Disconnect - reconnect control devices connected to low voltage installation wiring
594.	UEENEENP014A- Disconnect - reconnect water heaters connected to low voltage installation wiring
595.	UEENEENP015A- Disconnect - reconnect motors connected to low voltage installation wiring
596.	UEENEENP016A- Locate and rectify faults in low voltage appliances using set procedures
597.	UEENEENP017A- Locate and rectify faults in low voltage composite appliances using set procedures
598.	UEENEENP018A- Locate and rectify faults in low voltage control devices using set procedures
599.	UEENEENP019A- Locate and rectify faults in low voltage water heaters using set procedures



600.	UEENEEP020A- Locate and rectify faults in low voltage motors using set procedures
601.	UEENEEP021A- Disconnect - reconnect explosion-protected appliances and control devices connected to low voltage installation wiring
602.	UEENEEP022A- Disconnect and reconnect 3.3 kV electric propulsion components of self-propelled earth moving vehicles
603.	UEENEEP023A- HV Flexible Cables and Plugs
604.	UEENEEP024A- Attach cords and plugs to electrical equipment for connection to a single phase 230 Volt supply
605.	UEENEEP025A- Attach cords, cables and plugs to electrical equipment for connection to 1000 Va.c. or 1500 Vd.c. supply
606.	UEENEEP026A- Conduct in-service safety testing of electrical cord connected equipment and cord assemblies
607.	UEENEER001B- Contribute to the planning of a research project
608.	UEENEER002B- Contribute to the conduct of a research project
609.	UEENEER003B- Contribute to the development of a product/application/ service
610.	UEENEER004B- Contribute to the trial of a product/application/ service
611.	UEENEER005B- Contribute to intellectual property management
612.	UEENEER006B- Contribute to the commercialisation of products/applications/ services