

Year	Intent	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	Students will develop skills to be able to carry out independently	Unit 1:	Unit 1:	Unit 2:	Unit 2:	Unit 3: Solving	Unit 3: Solving
10	Engineering tasks	Enaineerina	Enaineerina	Producina	Producina	Enaineerina	Enaineerina
	For single statistics to be also a in many different contacts	Design and	Design and	Engineering	Engineering	Problems	Problems
	Engineering activities take place in many different contexts.	Communication	Communication	Products	Products		
	understanding to analyse engineered products in order to	Communication	Communication	1100000	1100000		LO3 know forming
	propose design solutions to meet requirements, to use skills	LO1 know how	LO3 be able to	LO1 be able to	LO1 be able to	LO1 understand	processes of
	developed to produce an engineered product, develop	engineered	propose design	interpret	interpret	effects of	engineering
	knowledge and understanding of engineering processes and	products meet	solutions	engineering	engineering	engineering	materials
	material properties to solve problems.	requirements		information	information	achievements	AC2 1 describe
			AC3.1 develop			AC1 1 describe	AC3. I describe
		AC1.1 identify	creative ideas for	AC1.1 interpret	AC1.1 interpret	engineering	nrocesses
		teatures that	engineered products	engineering	engineering	developments	Processes •
		primary function of	Identify features of	Symbols •	Symbols •	Developments •	Marking out •
		engineered products	other engineered	Conventions •	Conventions •	Engineering o	Cutting • Finishing •
		Features • Of	products • Generate	Information •	Information •	Structural o	Preparing • Shaping
		component parts •	ideas • Explore	Calculations	Calculations Sources	Mechanical o	Drilling • Turning •
		Electrical	implementation of	Sources • Sketches	Sketches	Electronic •	Brazing • Joining o
		components •	ideas	 Drawings Design 	Drawings • Design	Engineers involved	Permanent o
		Mechanical		specifications	specifications	o UK o International	Temporary fixings •
		components •	AC3.2 evaluate			Applications	Filing • Soldering
		Properties of	options for design	AC1.2 interpret	AC1.2 interpret		AC3 2 describe
		component materials	solutions Evaluate •	engineering	engineering	Materials	applications of
		AC1 2 identify	requirements • Eit for	Engineering	Engineering	materiale	engineering
		features of	purpose • Best fit •	information • Data	information • Data	AC1.2 explain	processes
		engineered products	Operating	charts • Data	charts • Data sheets	effects of	Applications • For
		that meet	performance •	sheets • Job sheets	Job sheets	engineering	material removal •
		requirements of a	Reliability Evaluation	 Specifications • 	Specifications •	achievements	For shaping and
		brief Requirements •	techniques • Total	Tolerances	Tolerances	Effects • In the	manipulation • For
		Aesthetic •	Design Model •			nome • In Industry •	Joining and
		Environment (where	SWOT analysis •	LO2 be able to	LO2 be able to plan	III Society	assembly • For heat
		Used) •	Advantages and	plan engineering	engineering	AC1.3 explain how	treatment
		Cost • Safety •	uisauvaniayes	production	production	environmental	
		Fragonomics • Size •	AC3 3 produce	AC2.1 identify	AC2.1 identify	issues affect	LO4 be able to
		Limits • Sustainability	design specifications	resources required	resources required	engineering	solve engineering
			Design specifications	Resources •	Resources •	applications	problems
		AC1.3 describe how	Clear	Materials •	Materials •	Environmental	1011
		engineered products	communication •	Equipment • Tools •	Equipment • Tools •	Issues • Use •	AC4.1 USe
		function Function •	Demands/wishes •	Time	Time	Recycling •	techniques for
		How components	Using prepared		AC2 2 00000000	Materials	solving engineering
		interretate	criteria	required activities	required activities	development •	problems
			ontena	Sequence •	Sequence • Prioritise	Engineering	Mathematical
				Prioritise activities •	activities • Which are	processes • Costs •	techniques • Use of
		LO2 be able to		Which are needed	needed before	Transportation •	formulae o Ohms
		communicate		before something	something else can	Sustainability	law o Efficiency •
		design solutions		else can be done •	be done • Within	Applications •	Areas and volumes



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engineering design solutions Drew billings of the service and		AC2.1 draw	Within designated	designated	Engineering	of geometric
soldions Draw (using British Standatti) - 3 off Standatti) - 3 off Standatti, Standatti - Dameter, - Dame		engineering design	parameters •	parameters •	processes •	shapes •
Image:		solutions Draw	Consideration of	Consideration of	Engineering	Calculation •
Stamatard) - 3 rd angle orthographic projection - Isometric projection - Isometric contaminer, mbuls - Contingencias Contingencias Datasessment of the largence of the projection of engineering of Title block of the Carter lines of Meric units of measurement of the Carter lines of Meric units of measurement - the Carter lines of Meric UMEC Carter lin		(using British	resources available	resources available •	products Learning	Measuring •
angle orthographic projector i stometric - Dimensione and associated symbols o Dimensione andius, height, depth, width - Conventions o Title block o Dimension lines o Dimension lines o Carter i Dimension lines o Dimension lines o Carter i Dimension lines o Specification 16 a A22.2 toescent cartification 17 a A22.2 communicate ductomes Assessment ortheria Carter i Dielearrer dusta daplication of language + Logical structure * Vocational Award in Carter i Dielearrer dusta daplication of language + Logical structure * Will The learner Carter i Dielearrer dusta daplication of language + Logical structure * Vocational Award in Carter i Dielearrer dusta daplication of language + Logical structure * Prosessement ortheria Carter i Dielearrer dusta darl dapplication of language + Logical structure * P		Standards) • 3 rd	 Contingencies 	Contingencies	outcomes	Estimation • Mean •
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associated symbols equipment isamini- cummerance, crummerance, rdrummer		 Dimensions and 	enaineerina	enaineerina	learner will: The	Metric o Metres.
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ardus, high, depth, depth, depth, adust, radus, high, depth, depth, with - Conventions production of engineering products AC3.1 use tools in products of engineering products AC4.2 convent between sometric solutions o Title block o Dimension lines o books Cols - Hand tools - Lathe Lathe tools - Turning tools - Hand tools - Dentable power tools Health and Safely - Awareness and and Safely practices. Learning outcomes AC2.1 describe program is and safely - Awareness and and safely - Awareness and and Safely practices. Learning outcomes Ac3.2 ause tools in properties required - Safely - Awareness and and Safely practices. Learning outcomes Ac3.3 ause tools in properties required - Safely - Awareness and and Safely practices. Learning outcomes Ac3.3 ause tools in properties required - Safely practices. Learning outcomes Ac3.2 ause tools in properties required - Safely practices. Learning outcomes Ac3.3 ause tools in properties - Safely - Awareness and and Safely practices. Learning outcomes Ac3.2 ause tools in products - Safely - Awareness and and Safely practices. Learning outcomes Ac3.2 ause tools in products - Safely - Awareness and and Safely practices. Learning outcomes Ac3.3 ause tools in products - Safely - Awareness and and Safely practices. Learning outcomes Ac3.3 ause tools in products - Safely - Awareness and and Safely practices. Learning outcomes Ac3.3 ause tools in products - Safely - Awareness and and Safely practices. Learning outcomes Ac3.3 ause tools in the Safely - Awareness and and Safely products - Safely - Awarenes and and Safely products - Safely - Control to		o Diameter.	- 4			Pounds, pence
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measurement - Hidden detail - Scale WUEC Level 1/2 Vocational Award in Engineering Specification of WUEC CBAC Luds Learning outcomesAwareness and gaptoration of Health and Safety practices. Learning outcomesAwareness angineering practices. Learning outcomesAwareness angineering practices. Structural e.g. Builtings. Learning outcomesContent The learner and seessment origina content The learnerContent The learner angraet to gradues to content The learnerContent The learner and seessment origina content The learnerContent The learner angraet to gradues to content the learnerContent The learner to c		units of	tools Health and	and safety •	of materials for	Construction lines •
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processes in processes in			processes	engineering		
				processes in		



				AC4.1 use	production of	AC2.1 AC2.3 select	
				engineering	engineered products	materials for a	
				processes in	Materials • Metals •	purpose Materials •	
				production of	Non-metals, e.g.	Ferrous • Non-	
				engineered	wood plastics	ferrous •	
				products Materials •	Engineering	Thermoplastics •	
				Metals • Non-	processes • Marking	Thermosetting	
				metals e.g. wood	out • Cutting •	plastics • Smart •	
				plastics	Finishing • Preparing	Composite	
				Engineering	Shaping • Drilling •	Composito	
				processes •	Turning • Brazing •		
				Marking out •	Joining • Filing •		
				Cutting • Finishing •	Soldering Health and		
				Preparing • Shaping	safety Awareness		
				• Drilling • Turning •	and application of		
				Brazing • Joining •	Health and Safety		
				Filing • Soldering	practices		
				Health and safety			
				Awareness and	AC4.2 evaluate		
				application of	quality of engineered		
				Health and Safety	products Evaluate •		
				practices	Inspection		
					techniques • Against		
				AC4.2 evaluate	success criteria •		
				quality of	Against engineering		
				engineered	information		
				products Evaluate •			
				Inspection			
				techniques •			
				Against success			
				criteria • Against			
				engineering			
				information			
11	Students will independently demonstrate skills during NEA. Unit	Unit 2:	Unit 2:	Unit 3: Solvina	Revision for –		
	2/3 and prepare for exam in Unit 1.	Producing	Producing	Engineering			
		Fraincaring	Fraincaring	Drahlama	11		
	Engineering activities take place in many different contexts.	Engineering	Engineering	Problems			
	Through these units, students will gain the knowledge and	Products	Products		Engineering		
	understanding to analyse engineered products in order to			NEA	Design and		
	propose design solutions to meet requirements, to use skills	NEA	NEA		Communication		
	developed to produce an engineered product, develop				Sommanication		
	knowledge and understanding of engineering processes and		Unit 3: Solving				
	material properties to solve problems.		Engineering				
			Drobloms				
			FIUDIEIIIS				