

Chapelton Academy **Y13** Curriculum Intent Plan

Subject: **Engineering**

Procedural knowledge (exam technique, skills etc):

- a. Analysing scenarios and case studies
- b. Written communication and presentation skills
- c. Design communication and presentation skills
- d. Practical manufacturing skills
- e. Research and referencing skills
- f. Understanding the key command words.
- g. Report writing
- h. Summary note-taking skills
- i. Organisation and time-management
- j. Self-evaluation skills
- k. Revision techniques
- l. University and employment pathways
- m. Literacy, numeracy & IT skills

Week & Date	No of lessons	Disciplinary Knowledge sequence	Disciplinary knowledge, that this interleaves with	Procedural knowledge progression	RS revision knowledge topic	HW focus and actions	Assessment (topic and skills assessed)
1 4 th September 2023 4th Sept Staff Inset	5	Unit 13: Welding Technology Learning Aim C assignment	Unit 2 Unit 45 Unit 13	b,d,e,f,g,h,i,j,l,m	Unit 13 Learning Aim C assignment	Unit 13 Learning Aim C assignment	UNIT 13: END OF OUTCOME ASSESSMENT (Assessing Learning Aim C)

5 th Sept Y12 Start 6 th Sept Y13 Start							
2 11 th September 2023	12	Unit 13: Welding Technology Learning Aim C assignment	Unit 2 Unit 45 Unit 13	b,d,e,f,g,h,l,j,m	Unit 13 Learning Aim C assignment	Unit 13 Learning Aim C assignment	UNIT 13: END OF OUTCOME ASSESSMENT (Assessing Learning Aim C)
3 18 th September 2023	12	Unit 44: Fabrication manufacturing processes A1: Fabricated products A2: Sheet materials A3: Cutting processes A4: Forming processes A5: Joining processes A6: Finishing processes Learning Aim A assignment	Introduction into research methods Primary manufacturing Secondary manufacturing	B,c,e,f,g,h,l,m	Unit 13 Learning Aim C resubmission	Unit 13 Learning Aim C resubmission	UNIT 44: END OF OUTCOME ASSESSMENT (Assessing Learning Aim A)
4 25 th September 2023 27 th Sept Y12 Awards	12	Unit 44: Fabrication manufacturing processes B1: Health and Safety requirements B2: Risk assessment B3: Interpreting design specifications	Unit 42 C content Unit 3 content	B,c,e,f,g,h,l,m	Unit 41 Learning Aim B/C assignment	Unit 41 Learning Aim B/C assignment	
5 2 nd October 2023	12	Unit 44: Fabrication manufacturing processes Learning Aim B/C assignment	All unit 44 B/C content Primary manufacturing Secondary manufacturing	B,c,d,f,g,l,j,m	Unit 44 Learning Aim B/C assignment	Unit 44 Learning Aim B/C assignment	DATA – 6 th October UNIT 44: END OF OUTCOME ASSESSMENT (Assessing Learning Aim B/C)
6 9 th October 2023	8	Unit 44: Fabrication manufacturing processes Learning Aim B/C assignment	All unit 44 B/C content Primary manufacturing Secondary manufacturing	B,c,d,f,g,l,j,m	Unit 44 Learning Aim B/C assignment	Unit 44 Learning Aim B/C assignment	UNIT 44: END OF OUTCOME ASSESSMENT (Assessing Learning Aim B/C)

10 th Oct Staff Inset 12 th Oct Progress Day							
7 16 th October 2023 17 th Oct Twilight CPD	12	Unit 44: Fabrication manufacturing processes Learning Aim B/C assignment	All unit 44 B/C content Primary manufacturing Secondary manufacturing	B,c,d,f,g,l,j,m	Unit 44 Learning Aim B/C assignment	Unit 44 Learning Aim B/C assignment	UNIT 44: END OF OUTCOME ASSESSMENT (Assessing Learning Aim B/C)
23 rd October 2023							
9 30 th October 2023 31 st Oct Y13 Parents Eve	12	Unit 44: Fabrication manufacturing processes D1: Lessons learned from manufacturing a fabricated product D2: Personal performance while manufacturing a fabricated product Learning Aim D Assignment	All unit 44 D content Primary manufacturing Secondary manufacturing	B,c,e,f,g,h,l,j,m	Unit 44 Learning Aim D assignment	Unit 44 Learning Aim D assignment	UNIT 44: END OF OUTCOME ASSESSMENT (Assessing Learning Aim D)
10 6 th November 2023 8 th Nov Open Evening	12	UNIT 41: Manufacturing Secondary machining processes A1: Traditional secondary machining processes A2: Specialist secondary machining processes A3: Sustainability characteristics of secondary machining processes	Introduction into research methods Manufacturing processes	b,e,f,g,h,l,m	Unit 13 Learning Aim C resubmission	Unit 13 Learning Aim C resubmission	
11	12	UNIT 41: Manufacturing Secondary machining processes Learning Aim, A assignment	All unit 41A content	a,b,e,f,g,l,j,m	Unit 41 Learning Aim A assignment	Unit 41 Learning Aim A assignment	UNIT 41: END OF OUTCOME ASSESSMENT (Assessing Learning Aim A)

13 th November 2023							
12 20 th November 2023 24 th Nov Staff Inset	9	UNIT 41: Manufacturing Secondary machining processes B1: H&S requirements when setting up secondary process machines B2: Risk assessment B3: Setting up secondary process machines Learning Aim B&C assignment	Introduction into research methods H&S, manufacturing process, safe working	A,b,d,e,f,h,i,m	Unit 41 learning Aim A resubmission	Unit 41 learning Aim A resubmission	
13 27 th November 2023	12	UNIT 41: Manufacturing Secondary machining processes Learning Aim B&C assignment	All unit 42 A, B&C content	a,b,d,e,f,g,i,j,m	Unit 41 Learning Aim B&C assignment	Unit 41 Learning Aim B&C assignment	UNIT 41: END OF OUTCOME ASSESSMENT (Assessing Learning Aim B&C)
14 4 th December 2023 4 th – 8 th Dec Y13 Mocks 1 7 th Dec Twilight CPD	12	Y13 Exams UNIT 41: Manufacturing Secondary machining processes Learning Aim B&C assignment	All unit 42 A, B&C content	a,b,d,e,f,g,i,j,m	Unit 41 Learning Aim B&C assignment	Unit 41 Learning Aim B&C assignment	UNIT 41: END OF OUTCOME ASSESSMENT (Assessing Learning Aim B&C)
15 11 th December 2023	12	UNIT 41: Manufacturing Secondary machining processes Learning Aim B&C assignment	All unit 42 A, B&C content	a,b,d,e,f,g,i,j,m	Unit 41 Learning Aim B&C assignment	Unit 41 Learning Aim B&C assignment	UNIT 41: END OF OUTCOME ASSESSMENT (Assessing Learning Aim B&C)
16 18 th December 2023	12	UNIT 41: Manufacturing Secondary machining processes D1: Lessons learned from machining a component D2: Personal	Introduction into research methods Reflection skills All unit 42 B, C & D content	a,b,e,f,g,h,i,j,m	Unit 41 Learning Aim D assignment	Unit 41 Learning Aim D assignment	DATA – 22 nd December UNIT 41: END OF OUTCOME ASSESSMENT (Assessing Learning Aim D)

		performance while machining a component Learning Aim D assignment					
25 th December 2023		Holiday					
1 st January 2024		Holiday					
19 th January 2024 11 th Jan Alumni Awards Evening	12	Unit 47: Composites Manufacture and repair processes A1: Characteristics of fibre materials A2: Characteristics of polymer resin matrix materials A3: Structure and mechanical properties of FRP composites A4: Applications of FRP composites Learning Aim A assignment	All unit 47 A content	A,b,e,f,g,h,i,m	Unit 47 Learning Aim A assignment	Unit 47 Learning Aim A assignment	UNIT 47: END OF OUTCOME ASSESSMENT (Assessing Learning Aim A)
20 th January 2024 16 th Jan Progress Day	12	Unit 6 – Microcontroller exam	All unit 6 content		Unit 6 revision/exam prep	Unit 6 revision/exam prep	
21 st January 2024 22 nd Jan Twilight CPD	12	Unit 47: Composites manufacture and repair processes B1: Safe working practices for FRP composites B2: Characteristics of wet and dry lay-up manufacturing processes B3: Repairing FRP composites Learning Aim B assignment	All unit 47 B content	A,b,e,f,g,h,i,m	Unit 47 Learning Aim B assignment	Unit 47 Learning Aim B assignment	UNIT 47: END OF OUTCOME ASSESSMENT (Assessing Learning Aim B)

22 29 th January 2024	12	Unit 47: Composites manufacture and repair processes C1: Applying wet and dry lay-up manufacturing processes C2: Applying FRP composite repair processes Learning Aim C assignment	All unit 47 C content	B,c,d,e,f,g,h,i,j,m	Unit 47 Learning Aim C assignment	Unit 47 Learning Aim C assignment	UNIT 47: END OF OUTCOME ASSESSMENT (Assessing Learning Aim C)
23 5 th February 2024 6 th Feb Open Evening 8 th Feb Staff Inset	8	Unit 47: Composites manufacture and repair processes Learning Aim C assignment	All unit 47 C content	b,c,d,e,f,g,h,i,j,m	Unit 47 Learning Aim C assignment	Unit 47 Learning Aim C assignment	DATA – 9 th February UNIT 47: END OF OUTCOME ASSESSMENT (Assessing Learning Aim C)
12 th February 2024		Holiday					
25 19 th February 2024	12	Unit 47: Composites manufacture and repair processes Learning Aim C assignment	All unit 47 C content	b,c,d,e,f,g,h,i,j,m	Unit 47 Learning Aim C assignment	Unit 47 Learning Aim C assignment	UNIT 47: END OF OUTCOME ASSESSMENT (Assessing Learning Aim C)
26 26 th February 2024 26 th Feb – 6 th March Y13 Mocks 2 28 th Feb Twilight CPD	12	Y13 Exams Unit 5: A Specialist Engineering Project A1: Project life cycle A2: Project idea generation and solution development A3: Feasibility study of solutions Learning Aim A assignment	All unit 5 A content Unit 3 content	A,b,c,e,f,g,h,i,m	Unit 5 Learning Aim A assignment	Unit 5 Learning Aim A assignment	UNIT 5: END OF OUTCOME ASSESSMENT (Assessing Learning Aim A)

27 4 th March 2024 26 th Feb – 6 th March Y13 Mocks 2	12	Y13 Exams Unit 5: A Specialist Engineering Project Learning Aim A Assignment	All unit 5 A content	a,b,c,e,f,g,h,l,m	Unit 5 Learning Aim A assignment	Unit 5 Learning Aim A assignment	UNIT 5: END OF OUTCOME ASSESSMENT (Assessing Learning Aim A)
28 11 th March 2024	12	Unit 5: A Specialist Engineering Project B1: Planning and monitoring project- management processes B2: Risk and issue project- management processes B3: Technical Specification B4: Design documentation	Unit 4 content Unit 3 content	a,b,c,e,f,g,h,l,m	Unit 47 learning Aim C resubmission	Unit 47 learning Aim C resubmission	DATA – 15 th March
29 18 th March 2024	12	Unit 5: A Specialist Engineering Project Learning Aim B Assignment	All unit 5 B content	a,b,c,d,e,f,g,h,l,m	Unit 5 Learning Aim B assignment	Unit 5 Learning Aim B assignment	UNIT 5: END OF OUTCOME ASSESSMENT (Assessing Learning Aim B)
30 25 th March 2024 27 th Mar Y13 Parents Eve 29 th March Bank Holiday	9	Unit 5: A Specialist Engineering Project Learning Aim B Assignment	All unit 5 B content	a,b,c,d,e,f,g,h,l,m	Unit 5 Learning Aim B assignment	Unit 5 Learning Aim B assignment	UNIT 5: END OF OUTCOME ASSESSMENT (Assessing Learning Aim B)
1 st April 2024							
8 th April 2024							

33 15 th April 2024 18 th Apr Progress Day	8	Unit 5: A Specialist Engineering Project C1: Undertake and test the solution to the problem C2: Demonstrate relevant behaviours C3: Present a solution to the problem.	Unit 5A&B content	a,b,c,e,f,g,h,l,m	Unit 5 Learning Aim A resubmission	Unit 5 Learning Aim A resubmission	
34 22 nd April 2024	12	Unit 5: A Specialist Engineering Project Learning Aim C assignment	All unit 5 C content	a,b,c,d,e,f,g,h,l,m	Unit 5 Learning Aim C assignment	Unit 5 Learning Aim C assignment	<i>DATA – 25th April</i> UNIT 5: END OF OUTCOME ASSESSMENT (Assessing Learning Aim C)
35 29 th April 2024 30 th Apr Summer Exams Start 2 nd May Twilight CPD	12	Unit 5: A Specialist Engineering Project Learning Aim C assignment	All unit 5 C content	a,b,c,d,e,f,g,h,l,m	Unit 5 Learning Aim C assignment	Unit 5 Learning Aim C assignment	UNIT 5: END OF OUTCOME ASSESSMENT (Assessing Learning Aim C)
36 6 th May 2024 6 th May Bank Holiday	9	Unit 5: A Specialist Engineering Project Learning Aim C assignment	All unit 5 C content	a,b,c,d,e,f,g,h,l,m	Unit 5 Learning Aim C assignment	Unit 5 Learning Aim C assignment	UNIT 5: END OF OUTCOME ASSESSMENT (Assessing Learning Aim C)
37 13 th May 2024 17 th May Y13	12	Unit 5: A specialist Engineering Project assignment resubmissions	All unit 5 content	A,b,c,d,e,f,g,h,l,m	Unit 5 resubmissions	Unit 5 resubmissiond	

leavers day							
38 20 th May 2024	12						