

INDUSTRIAL TECHNOLOGY DEPARTMENT COURSE OUTLINE
SEPTEMBER 2025-JUNE 2026
INDUSTRIAL TECHNIQUES GRADE 9

INDUSTRIAL TECHNIQUES GRADE 9 (TERM 1 -CHRISTMAS)

PROPOSED THEME:

Building & Electrical Safety

No.	TOPIC	TERM & THEME	OBJECTIVES & CONTENT SUMMARY	ACTIVITIES & METHODOLOGIES	ASSESSMENT & DIFFERENTIATION	TIMEFRAME (TENTATIVE)
1.	Workshop & Site Safety	Christmas -Safety	Define safety Identify safety gear & their uses Safety principles, PPE, hazard symbols, risk assessment, workshop rules	Class discussion Visual aids Create safety rules class posters	Poster creation In-class worksheet 5-min weekly quiz	Sept. 9–27
2.	Fire & ElectricalSafety	Christmas-Safety	Define fire Demonstrate how to use an extinguisher Fire classes, extinguishers, safe electrical practices	Group research Homework: Model fire extinguisher Video demos Demonstration, drill practice	Quiz Peer feedback, extinguisher demo Peer feedback	Sept.23–Oct. 4

3.	Hand & Power Tools	Christmas-Safety	Identify & use hand and power tools Demonstrate safe usage	Matching tool names to images Demonstration sessions	Quiz, Demonstration	Oct 7–18
4.	Foundation Types	Christmas-Safety	Strip, pad, raft foundations and their uses	Visual models, group presentation	Quiz, diagram labelling	Nov 4–15
5.	Framing & Superstructure Basics	Christmas-Safety	Basic walls, block bonds, timber frame members	Small model build, group discussion	Peer review, block bond exercise	Nov 18–Dec 6
6.	Building Site Preparation	Christmas-Safety	Site layout, clearing, setting out building lines	Field exercise, model demo or (site visit)	Sketch site plan, observation	Oct 21–Nov 1

INDUSTRIAL TECHNIQUES GRADE 9 (TERM 2 - EASTER TEM)

PROPOSED THEME:

No.	TOPIC	TERM & THEME	OBJECTIVES & CONTENT SUMMARY	ACTIVITIES & METHODOLOGIES	ASSESSMENT & DIFFERENTIATION	TIMEFRAME (TENTATIVE)
Electrical Technology						
7.	Electrical Tools & Equipment	Easter – Tool Identification & Use	Identify electrical tools, test instruments	Show-and-tell, class demonstration	Tool quiz	Jan 6–17
8.	Electrical Circuits Introduction	Easter –Basic Electrical Theory	Identify series & parallel circuits & Ohm's Law basics Solve for current, voltage, and resistance Install 1-lamp/1-switch & 2-way circuits	Breadboard builds, multimeter practice Circuit building Peer tutoring	Worksheet, practical test	Jan 20–31
9.	Electrical Protective Devices	Easter-Electrical Safety Systems	Fuses, breakers, ELCBs, their function and installation	Demo panel, group install	Observation checklist	Feb 3–14
10.	Simple House Wiring	Easter-Electrical Fundamentals	Wire a basic lighting circuit, switches, lamp holder	Practice board wiring, group task	Practical test	Feb 17–28
11.	Communication & Workplace Behaviour	Easter– Professional Skills	Define communication Types of communication Workplace etiquette and attire	Group task: Present on formal, casual, or professional dress Research & dress-up	Group oral presentation Peer rubric assessment	Mar 3–14

--	--	--	--	--	--	--

INDUSTRIAL TECHNIQUES GRADE 9 (TERM 3- SUMMER TERM)

PROPOSED THEME:

No.	TOPIC	TERM & THEME	OBJECTIVES & CONTENT SUMMARY	ACTIVITIES & METHODOLOGIES	ASSESSMENT & DIFFERENTIATION	TIMEFRAME (TENTATIVE)
Technical Drawing						
12.	Introduction to Technical Drawing	Summer- Drawing Fundamentals	Purpose of drawings, industrial drawing standards Identify drawing tools	Class discussion, video	Worksheet, oral Q&A	Apr 21–May 2
13.	Drawing Instruments & Lettering	Summer-Drawing Tools & Techniques	Identify instruments, practice lettering, lines	Guided practice	Lettering exercise, line test	May 5–16
14.	Orthographic Projection	Summer-Pictorial to Orthographic Conversion	Identify and demonstrate First and third angle projection, basic layout	Sketching practice, demonstration	Orthographic worksheet	May 19–30
15.	Introduction to CAD	Summer-Digital Drafting Skills	CAD Simple CAD skills (AutoCAD, SketchUp)	Computer lab practice	CAD printout, rubric	Jun 2–13
16.	Blueprint Reading & Drawing	Summer – Drafting Intro	Introduction to blueprint symbols and elements	Interpret basic plans Sketch title blocks and symbols	Plan interpretation task Diagram worksheet	Jun 2–13

