

INDUSTRIAL TECHNOLOGY DEPARTMENT COURSE OUTLINE
SEPTEMBER 2025-JUNE 2026
BUILDING AND FURNITURE TECHNOLOGY (GRADE 10)

BUILDING TECHNOLOGY GRADE 10 (TERM 1- CHRISTMAS)

PROPOSED THEME:

Building and Furniture Technology

| No. | TOPIC | TERM & THEME | OBJECTIVES & CONTENT SUMMARY | ACTIVITIES & METHODOLOGIES | ASSESSMENT & DIFFERENTIATION | TIMEFRAME (TENTATIVE) |
|-----|----------------------------------|---------------------------------------|--|---|--|--------------------------|
| 1. | Workshop, Personal & Fire Safety | Christmas – Core: Safety | Define workshop, fire, machine, and tool safety Identify personal protective gear Understand safe machine/tool operation | Safety rule review Case study discussions Safety gear display | Assignment: List 12 general workshop safety rules Quiz Group brainstorm for ELL learners | Sept. 8 – Sept. 26, 2025 |
| 2. | Hand Tools | Christmas – Core Skills | Name, use, maintain & inspect saws, planes, chisels, hammers, squares, etc. | Tool identification game Demonstrations on tool care and safety | Observation checklist Practical demo | Sept. 29 – Oct. 17, 2025 |
| 3. | Organizational Structure | Christmas – Core: Industry Operations | Define organizational structure Explore types and functions | Analyze real-world org charts Class discussion | Assignment: Download & submit two organizational charts | Oct. 20 – Nov. 7, 2025 |

| | | | | | | |
|----|-----------------------|---------------------------------------|---|---|---|-------------------------|
| | | | of structures Compare construction and manufacturing industries | Diagram comparison | Chart labeling exercise | |
| 4. | Timber Identification | Christmas – Timber Technology | Identify cross-section of a tree Differentiate hardwood vs softwood Explain moisture content and preservation methods | Wood sample inspection Tree cross-section sketch Moisture test demo | Quiz and worksheet Group discussion for support learners | Nov. 10 – Nov. 28, 2025 |
| 5. | Accident Report | Christmas – Core: Workplace Protocols | Define accident report Identify its purpose and components Use report format to describe incidents | Role-play scenarios Review sample reports Writing practice | Assignment: Write a workshop-related accident report Peer edit for clarity & structure | Dec. 1 – Dec. 3, 2025 |
| 6. | Measuring & Marking | Christmas – Core Skills | Use ruler, try square, tape, marking gauge, calipers and dividers accurately | Marking out exercise on timber Measuring challenge activity | Short worksheet Practical task with peer review | Dec. 4 – Dec. 9, 2025 |

BUILDING TECHNOLOGY GRADE 10 (TERM 2 -EASTER)

PROPOSED THEME:

Building and Furniture Technology

| No. | TOPIC | TERM & THEME | OBJECTIVES & CONTENT SUMMARY | ACTIVITIES & METHODOLOGIES | ASSESSMENT & DIFFERENTIATION | TIMEFRAME (TENTATIVE) |
|-----|-------------------------------|--------------------------------------|---|---|---|-------------------------|
| 7. | Timber Conversion & Seasoning | Easter – Timber Technology | Explain plain/quarter sawing Describe natural & artificial seasoning methods | Lumber conversion chart Seasoning process discussion | Quiz Sketch or flowchart of seasoning process | Jan. 12 – Jan. 30, 2026 |
| 8. | Wood Defects & Preservation | Easter – Timber Technology Continued | - Identify common wood defects - Explain methods of wood preservation | Defect using with samples/images Preservation method role play | Worksheet Matching task Small group activity | Feb. 2 – Feb. 20, 2026 |
| 9. | Introduction to Drawing | Easter – Drawing & Design | Create basic sketches Identify line types Use orthographic drawing | Sketching exercises Orthographic drill | Drawing task Peer review and correction | Feb. 23 – Mar. 13, 2026 |
| 10. | Building Site Selection | Easter – Site Preparation | Define and identify types of building sites List factors to consider when selecting a site | Case studies Map reading Cost factor comparison | Take-home worksheet on site selection Visual charts for soil types | Mar. 16 – Apr. 3, 2026 |

| | | | | | | |
|-----|-----------------------|-------------------------------------|---|--|---|------------------------|
| | | | Consider cost and soil types | | | |
| 11. | Site Work | Easter – Site Preparation Continued | <p>Identify construction documents</p> <p>Understand contractor roles</p> <p>Explore temporary site facilities (site office, sanitation, utilities)</p> | <p>Diagram labeling</p> <p>Group presentations</p> <p>Real-life project examples</p> | <p>Class quiz</p> <p>Site facility layout sketch</p> | Mar. 30 – Apr. 4, 2026 |
| 12. | Laying Out a Building | Easter– Building Setup | <p>Set up datum post and base line</p> <p>Establish profile boards</p> <p>Lay out foundation and block wall</p> <p>Check squareness (2 methods)</p> | <p>Outdoor practical layout</p> <p>Demonstration and peer practice</p> | <p>Observation checklist</p> <p>Practical task evaluation</p> | Apr. 6 – Apr. 7, 2026 |

BUILDING TECHNOLOGY GRADE 10 (TERM 3 -SUMMER)

PROPOSED THEME:

Building and Furniture Technology

| No. | TOPIC | TERM & THEME | OBJECTIVES & CONTENT SUMMARY | ACTIVITIES & METHODOLOGIES | ASSESSMENT & DIFFERENTIATION | TIMEFRAME (TENTATIVE) |
|-----|------------------------------|---|--|---|---|------------------------|
| 13. | Basic Furniture Construction | Summer – Practical & Project Development (Classwork & SBA Furniture Project) | <p>Understand and apply cutting lists, select appropriate tools, layout furniture components, and perform basic joinery techniques</p> <p>Identify and create basic joints (butt, lap, mortise & tenon, dowel</p> <p>Draw selected project furniture project , Select joints</p> | <p>Practical cutting list preparation, tool handling exercises, layout marking, hands-on joinery practice</p> <p>Joint model making Joinery poster</p> <p>Autocad Sketch or drawing</p> | <p>Practical project assessment, tool selection quiz, peer and teacher observation</p> <p>Practical assessment Short written task</p> | Apr. 21 – May 16, 2026 |
| 14. | Finishes | Summer – Practical & Project Development | Learn sanding techniques, apply sealers, paint, and varnish furniture pieces | Demonstrations on sanding, sealing, painting, and varnishing; hands-on finishing practice | Practical finishing project, presentation of finished pieces, reflective journal | May 19 – June 6, 2026 |
| 15. | SBA Project Tracking Process | Easter -SBA Progress | <p>Complete Organization hart</p> <ul style="list-style-type: none"> - Construction - Manufacturing | Assignment: Download & submit two organizational charts | <p>Checklist</p> <p>Oral Questioning</p> | June 9 – June 16, 2026 |

| | | | | | | |
|--|--|--|--|---|--|--|
| | | | Accident Report Layout of a building Start SBA Furniture Project | Write a workshop- related accident report Draw selected project(furniture project) Outdoor practical layout (add pictures) | Picture evidence of Practical Practical task evaluation Rubric (Teacher) | |
|--|--|--|--|---|--|--|