

# Trades, Manufacturing & Transportation (TMT)

● Grades 10–12

May 2009 (Draft)

## ALBERTA EDUCATION CATALOGUING IN PUBLICATION DATA

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The primary intended audience for this document is:

<i>Administrators</i>	
<i>Counsellors</i>	
<i>General Audience</i>	
<i>Parent School Councils</i>	
<i>Parents</i>	
<i>Students</i>	
<i>Teachers</i>	✓

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**Note:** Additional new resources are in the final stages of the approval process. When they are authorized, they will be included in the next of this listing.

## ORGANIZATION OF THIS DOCUMENT

The authorized list of resources for Career and Technology Studies Trades, Manufacturing & Transportation (TMT) contains listings for each occupational area. The document is organized as follows:

### Authorized Resources Listed by Occupational Area (Grades 10–12)

Resources are listed within each occupational area beginning with basic resources, followed by support resources and then teaching resources.

Each entry provides the following information:

- series name (if applicable)
- title of resource
- authorization category (basic, support, teaching)
- LRC order number and price
- occupational areas(s) authorized for.

### Annotated Bibliography (listed alphabetically by title)

Each of the resources in this section includes an annotation. Each annotation page identifies the:

- series name (if applicable)
- title of resource
- authorization category (basic, support, teaching)
- type of resource—the annotation has an icon of the type of the resource (e.g., print, video, CD-ROM)
- occupational area(s) authorized for
- LRC order number and price.

# RESOURCE AUTHORIZATION CATEGORIES

## New CTS Trades, Manufacturing & Transportation (TMT) Resources

This resource list includes instructional resources for occupational areas within the CTS cluster Trades, Manufacturing & Transportation (TMT) that have been authorized for use in Alberta schools.

Alberta Education selects and authorizes the best possible instructional resources to support the implementation of approved programs of study. Teachers are encouraged to select resources that meet the diverse learning needs of the students they teach. The resource authorization categories are **student basic**, **student support** or **teaching**.

**Student Basic** learning resources are those student learning resources authorized by Alberta Education as the most appropriate for addressing the majority of outcomes of the course(s) or substantial components of the course(s); or the most appropriate for meeting general outcomes across two or more grade levels.

**Student Support** learning resources are those student learning resources authorized by Alberta Education to assist in addressing some of the outcomes of the course(s) or components of the course(s); or to assist in meeting the outcomes across two or more grade levels.

**Teaching** resources are those teaching resources identified as the best available resources to support the implementation of programs of study and courses; they may be teacher guides to accompany student resources or teacher professional resources. The authorized teaching guides are listed with the student resources.

**Note:**

Alberta Education strongly recommends that teachers read all selections in the student resources and all activities in the teacher guides prior to using them with students. Careful consideration should be given to the sensitivities of both the student audience and the community, and of the reading levels of students.

## Cluster: Trades, Manufacturing & Transportation (TMT)

### Career and Technology Studies Courses by Occupational Areas and Levels

#### Occupational Area: *Construction*

Introductory Courses	Intermediate Courses	Advanced Courses
CON1010 Construction Tools & Materials	CON2010 Site Preparation	CON3010 Concrete Work (Structures & Finishes)
CON1070 Building Construction	CON2020 Concrete Forming	CON3020 Masonry Work (Structures & Finishes)
CON1120 Product Management	CON2030 Alternative Foundations	CON3030 Wall & Ceiling Finishing
CON1130 Solid Stock Construction	CON2035 Floor Framing Systems	CON3040 Stair Construction
CON1140 Turning Operations	CON2045 Wall Framing Systems	CON3050 Roof Structures 2 (Framing & Covering)
CON1160 Manufactured Materials	CON2050 Roof Structures 1 (Framing & Finishing)	CON3060 Doors & Trim
CON1180 Mould Making & Casting	CON2060 Exterior Finishing (Door, Window & Siding)	CON3070 Floorcovering
	CON2070 Electrical Systems	CON3080 Energy-efficient Housing
	CON2080 Plumbing Systems	CON3090 Renovations/Restorations
	CON2090 Climate Control Systems	CON3105 Commercial Structures
	CON2100 Agri-structures	CON3110 Site Management
	CON2120 Multiple Material	CON3120 Tool Maintenance
	CON2130 Furniture Making 1 (Box Construction)	CON3130 Furniture Making 3 (Leg & Rail)
	CON2140 Furniture Making 2 (Frame & Panel)	CON3140 Furniture Making 4 (Surface Enhancement)
	CON2150 Finishing & Refinishing	CON3150 Furniture Repair

**Introductory Courses****Intermediate Courses****Advanced Courses**

CON2160  
Cabinetmaking 1 (Web & Face  
Frame)

CON3160  
Cabinetmaking 3  
(Cabinets/Countertops)

CON2170  
Cabinetmaking 2 (Door & Drawer)

CON3170  
Cabinetmaking 4 (Layout &  
Installation)

CON2180  
Wood Forming

CON3190  
Production Planning

CON2190  
Manufacturing Systems

CON3200  
Production Management

CON2200  
Product Development

CON3210  
Framing Systems 2 (Floor, Wall  
& Ceiling)

**Carpentry Apprenticeship**

CRA3400  
Introduction to Work Site Safety

CRA3415  
Site Preparation & Floor Systems

CRA3430  
Construction Machines, Tools &  
Equipment

CRA3405  
Basic Hand, Power Tools &  
Safety

CRA3420  
Foundations & Concrete  
Structures

CRA3435  
Blueprint Interpretation

CRA3410  
Construction Materials &  
Processes

CRA3425  
Blueprint Drawings & Sketching

**Occupational Area: *Electro-Technologies*****Introductory Courses****Intermediate Courses****Advanced Courses**

ELT1010  
Electro-assembly 1

ELT2010  
Electro-assembly 2

ELT3010  
Electro-assembly 3

ELT1030  
Conversion & Distribution

ELT2020  
Electrical Servicing

ELT3020  
Electronic Servicing

ELT1050  
Electronic Power Supply 1

ELT2030  
Branch Circuit Wiring

ELT3030  
Power Systems & Services

ELT1080  
Control Systems 1

ELT2050  
Electric Power Supply 2

ELT3040  
Generation/Transformation

ELT1090  
Analog Communication 1

ELT2080  
Control Systems 2

ELT3110  
Amplifiers

ELT1110:  
Security Systems 1

ELT2090  
Analog Communication 2

ELT3130  
Data/Telemetry Systems

ELT1130  
Robotics 1

ELT2110  
Security Systems 2

ELT3140  
Motors

ELT1140  
Robotics Applications 1

ELT2120  
Electro-optics

ELT3150  
Robotics 3

**Introductory Courses****Intermediate Courses****Advanced Courses**

ELT2130  
Magnetic Control Devices

ELT3160  
Control Applications

ELT2140  
Robotics 2

ELT3170  
Robotics Microprocessors

ELT2150  
Electronic Controls

ELT3180  
Robotics Vision Systems

ELT2160  
Robotics Sensor 1

ELT3190  
Robotics Kinematics &  
Behaviour

ELT2170  
Robotics Sensor 2

ELT3200  
Robotics Artificial Intelligence

ELT2180  
Process Control

ELT3210  
Expert Systems

**Occupational Area: *Fabrication*****Introductory Courses****Intermediate Courses****Advanced Courses**

FAB1010  
Fabrication Tools & Materials

FAB2010  
Structural Engineering

FAB3010  
Materials Testing

FAB1040  
Oxyacetylene Welding

FAB2020  
Print Reading

FAB3020  
Metallurgy Fundamentals

FAB1048  
Semi-automated/Automated  
Welding

FAB2030  
Oxyfuel Welding

FAB3030  
Gas Tungsten Arc Welding

FAB1050  
Basic Electric Welding

FAB2040  
Thermal Cutting

FAB3040  
Specialized Welding

FAB1090  
Sheet Fabrication 1 (Hand  
Processes)

FAB2048  
Flux Core Arc Welding 1

FAB3048  
Flux Core Arc Welding 2

FAB1100  
Fabrication Principles

FAB2050  
Arc Welding 1

FAB3050  
Arc Welding 3

FAB1110  
Bar & Tubular Fabrication

FAB2060  
Arc Welding 2

FAB3060  
Arc Welding 4

FAB1120  
Foundry 1 (One-piece Pattern)

FAB2070  
Gas Metal Arc Welding 1

FAB3070  
Pipe & Tubular Welding

FAB1130  
Principles of Machining

FAB2090  
Sheet Fabrication 2 (Machine  
Processes)

FAB3080  
Automated Welding

FAB1160  
Production Systems

FAB2100  
Sheet Fabrication 3 (Parallel Line)

FAB3090  
Sheet Fabrication 4 (Radial Line)

**Introductory Courses****Intermediate Courses****Advanced Courses**

FAB2110  
Forging Fundamentals

FAB3110  
Sheet Fabrication 5 (Duct Components)

FAB2120  
Foundry 2 (Split Pattern)

FAB3120  
Foundry 3 (Core Moulding)

FAB2130  
Precision Turning 1

FAB3130  
Precision Turning 2

FAB2140  
Precision Milling 1

FAB3140  
Precision Milling 2

FAB2150  
CNC Turning (Computer Numerical Control)

FAB3150  
CNC Milling (Computer Numerical Control)

FAB2160  
Custom Fabrication

FAB3160  
Prefabrication Principles

FAB2170  
Pipe Fitting

FAB3170  
Gas Metal Arc Welding 2

**Welding Apprenticeship**

WDA3400  
Fabrication Orientation & Safety

WDA3415  
Gas Metal Arc Welding

WDA3430  
Shielded Metal Arc Welding (Part 1)

WDA3405  
Fabrication Tools & Weld Faults

WDA3420  
Flux Cored Arc Welding & Submerged Arc Welding

WDA3435  
Shielded Metal Arc Welding (Part 2)

WDA3410  
Oxyfuel Welding

WDA3425  
Materials Handling

WDA3440  
Shop/Lab Practices for GMAW, FCAW & SAW

**Occupational Area: *Logistics*****Introductory Courses****Intermediate Courses****Advanced Courses**

LOG1010  
Logistics

LOG2010  
Warehouse & Distribute 2

LOG3010  
Warehouse & Distribute 3

LOG1020  
Warehouse & Distribute 1

LOG2020  
Traffic & Transport 2

LOG3020  
Traffic & Transport 3

LOG1030  
Traffic & Transport 1

LOG2030  
Purchasing 2

LOG3030  
Purchasing 3

LOG1040  
Purchasing 1

LOG2040  
Inventory Management 1

LOG3040  
Inventory Management 2

## Occupational Area: *Mechanics*

### Introductory Courses

MEC1010  
Modes & Mechanisms

MEC1015  
Mechanics Tools & Materials

MEC1020  
Vehicle Service & Care

MEC1040  
Engine Fundamentals

MEC1090  
Electrical Fundamentals

MEC1110  
Pneumatics & Hydraulics

MEC1130  
Mechanical Systems

MEC1150  
Ride & Control Systems

MEC1160  
Structures & Materials

MEC1165  
Mechanics Welding  
Fundamentals

MEC1170  
Metal Forming & Finishing

MEC1190  
Surface Preparation 1

### Intermediate Courses

MEC2010  
Vehicle Detailing

MEC2020  
Vehicle Maintenance

MEC2030  
Lubrication & Cooling

MEC2040  
Fuel & Exhaust Systems

MEC2050  
Alternative Fuel Engines

MEC2060  
Ignition Systems

MEC2070  
Emission Controls

MEC2090  
Electrical Components

MEC2100  
Power Assist Accessories

MEC2110  
Braking Systems

MEC2120  
Hydraulic Accessories

MEC2130  
Drive Line

MEC2140  
Transmissions/Transaxles

MEC2150  
Suspension Systems

MEC2160  
Steering Systems

MEC2170  
Metal Repair & Finishing

MEC2180  
Trim Replacement

MEC2190  
Surface Preparation 2

### Advanced Courses

MEC3010  
Buying & Selling Vehicles

MEC3020  
Vehicle Value Appraisal

MEC3030  
Engine Diagnosis

MEC3040  
Engine Tune-up

MEC3050  
Engine Replacement

MEC3060  
Engine Reconditioning 1

MEC3070  
Engine Reconditioning 2

MEC3080  
Alternative Energy Systems

MEC3090  
Computer Systems

MEC3100  
Safety Systems

MEC3110  
Climate Control

MEC3120  
Power Assisting

MEC3130  
Automatic Transmissions

MEC3140  
Drive Train Repair

MEC3150  
Wheel Alignment

MEC3160  
Body Repair Estimation

MEC3170  
Damage Analysis

MEC3180  
Damage Repair 1

**Introductory Courses****Intermediate Courses****Advanced Courses**

MEC2200  
Refinishing 1

MEC2210  
Touch-up & Finishing

MEC2220  
Interior Repairs

MEC3190  
Damage Repair 2

MEC3200  
Refinishing 2

MEC3210  
Plastic & Fibreglass

MEC3220  
Glass Replacement

MEC3230  
Refinishing 3

**Auto Service Technician Apprenticeship**

ASA3400  
Basic Tools & Materials

ASA3405  
Electrical Fundamentals

ASA3410  
Electrical Circuits & Diagnosis

ASA3415  
Frames, Suspension & Steering  
Linkages

ASA3420  
Manual & Power Steering  
Systems

ASA3425  
Steering Angles, Steering  
Columns & Restraint Systems

ASA3430  
Wheel Alignment Procedures

ASA3435  
Braking Systems I

ASA3440  
Braking Systems II

ASA3445  
Braking Systems III

ASA3450  
Drivelines & Introductory Welding

## Availability

Most of the new Alberta resources are available for purchase from:

Learning Resources Centre (LRC)  
12360 – 142 Street, Edmonton, AB T5L 4X9  
Telephone: 780-427-5775  
Fax: 780-422-9750  
Internet: <http://www.lrc.education.gov.ab.ca>

LRC order numbers and prices (as of the printing of this document) are included for each resource.

Those resources what must be purchased directly from the vendor/distributor are so noted on the authorized list and on the annotation. A listing of vendors/distributors is provided at the end of this document.

# Trades, Manufacturing & Transportation (TMT)

**Authorized Resources  
Listed by Occupational Area**

 Grades 10–12

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# Construction



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# Career and Technology Studies

## Trades, Manufacturing & Transportation: Construction

Series / Title	Copyright Date	Status / Course(s)	LRC Order No.	Price
<b>Basic Resources</b>				
Electrical Wiring Residential (4th Canadian ed.) (Student Text) (includes: Updated Blueprint Set)	2007	Basic Also for Electro-Technologies Occupational Area.	753043	\$93.70
Modern Cabinetmaking (Student Text)	2005	Basic	642597	\$87.00
Modern Plumbing (Student Text)	2005	Basic	753455	\$72.85
Modern Woodworking: Tools, Materials, and Processes (Student Text)	2006	Basic	753434	\$87.00
Technology: Engineering & Design (6th ed.) (Student Text)	2008	Basic Also for Fabrication Occupational Area.	753007	\$65.10
House Wiring (2nd ed.) (Student Text) <i>Residential Construction Academy</i>	2008	Basic Also for Electro-Technologies Occupational Area.	753039	\$93.65
<b>Support Resources</b>				
Modern Cabinetmaking: Workbook	2005	Support	642604	\$22.70
Modern Plumbing: Job Practice Manual	2005	Support	753456	\$22.90
Modern Woodworking: Tools, Materials, and Processes: Workbook	2006	Support	753435	\$20.85
Technology: Engineering & Design (6th ed.): Workbook	2008	Support Also for Fabrication Occupational Area.	753008	\$25.75
Foundation to Roof <i>Deconstruction: The Science of Building a House</i>	2004	Support	752449	\$151.95
Plumbing to Paint <i>Deconstruction: The Science of Building a House</i>	2004	Support	752453	\$151.95
Basic Principles for Construction (2nd ed.) (Student Text) <i>Residential Construction Academy</i>	2008	Support	753041	\$59.95
Bleaching <i>Wood Finishing</i>	2007	Support	752447	\$87.80
Lacquers and Varnishes <i>Wood Finishing</i>	2007	Support	752451	\$81.80
Oil, Shellac, and Wax <i>Wood Finishing</i>	2007	Support	752452	\$126.20
Painting Wood Furniture <i>Wood Finishing</i>	2007	Support	752455	\$81.80
Preparing Wood <i>Wood Finishing</i>	2007	Support	752456	\$126.20

# Career and Technology Studies (continued)

## Trades, Manufacturing & Transportation: Construction

Series / Title	Copyright Date	Status / Course(s)	LRC Order No.	Price
Refinishing <i>Wood Finishing</i>	2007	Support	752446	\$126.20
Staining Wood <i>Wood Finishing</i>	2007	Support	752500	\$81.80
Basic Methods of Measuring and Cutting <i>Woodworking: The Art and the Craft</i>	2004	Support	723371	\$16.00
Creating Biscuit and Dowel Joints <i>Woodworking: The Art and the Craft</i>	2004	Support	752813	\$16.00
Creating Dado Joints <i>Woodworking: The Art and the Craft</i>	2004	Support	752815	\$16.00
Creating Dovetail Joints and Casework <i>Woodworking: The Art and the Craft</i>	2004	Support	752818	\$16.00
Creating Miter Joints <i>Woodworking: The Art and the Craft</i>	2004	Support	752816	\$16.00
Creating Mortise-and-Tenon Joints <i>Woodworking: The Art and the Craft</i>	2004	Support	752817	\$16.00
Creating Rabbet Joints <i>Woodworking: The Art and the Craft</i>	2004	Support	752814	\$16.00
Finishing Techniques <i>Woodworking: The Art and the Craft</i>	2004	Support	752819	\$16.00
Gluing and Clamping <i>Woodworking: The Art and the Craft</i>	2004	Support	723173	\$16.00
Methods of Cutting Circles and Curves <i>Woodworking: The Art and the Craft</i>	2004	Support	752899	\$16.00
Planing <i>Woodworking: The Art and the Craft</i>	2004	Support	752811	\$16.00
Ripping and Crosscutting <i>Woodworking: The Art and the Craft</i>	2004	Support	752793	\$16.00
Sanding <i>Woodworking: The Art and the Craft</i>	2004	Support	752812	\$16.00
Sawing and Shaping <i>Woodworking: The Art and the Craft</i>	2004	Support	752794	\$16.00
Working with Nails and Screws <i>Woodworking: The Art and the Craft</i>	2004	Support	723165	\$16.00
Safety in the Woodshop <i>Workshop Safety</i>	2007	Support Also for Fabrication Occupational Area.	734914	\$16.00

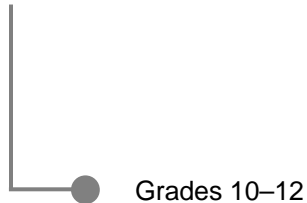
# Career and Technology Studies (continued)

## Trades, Manufacturing & Transportation: Construction

Series / Title	Copyright Date	Status / Course(s)	LRC Order No.	Price
<b>Teaching Resources</b>				
Building Construction Illustrated (4th ed.)	2008	Teaching	752910	\$51.45
Canadian Wood-Frame House Construction (3rd ed. Revised)	2006	Teaching	753031	\$28.40
Electrical Wiring Residential (4th Canadian ed.): Instructor's Resource CD-ROM	2007	Teaching Also for Electro-Technologies Occupational Area.	753044	\$134.75
Handi-Guide to Alberta's OH & S Act, Regulation and Code (2nd ed.)	2006	Teaching Also for Electro-Technologies, Fabrication, Logistics and Mechanics Occupational Areas.	653130	\$35.30
Health & Safety Tool Kit for Alberta Auto & Truck Dealerships	2007	Teaching Also for Fabrication, Logistics and Mechanics Occupational Areas.	Pending	
Modern Cabinetmaking: Instructor's Manual		Teaching	642612	\$27.35
Modern Plumbing: Instructor's Resource CD (Windows Version)	2006	Teaching	753458	\$269.90
Modern Woodworking: Tools, Materials, and Processes: Instructor's Guide	2006	Teaching	753436	\$43.85
SAFESTART: Advanced Safety Awareness Training (2nd Ed.) (Kit)	2007	Teaching Also for Electro-Technologies, Fabrication, Logistics and Mechanics Occupational Areas.	Pending	
Technology: Engineering & Design (6th ed.): Teacher Annotated Edition	2008	Teaching Also for Fabrication Occupational Area.	753009	\$111.05
Technology: Engineering & Design (6th ed.): Teacher Resource CD-ROM (Windows / Macintosh Version)	2008	Teaching Also for Fabrication Occupational Area.	753010	\$267.65
Technology: Engineering & Design (6th ed.): Vocabulary Puzzlemaker CD-ROM (Windows / Macintosh Version 3.1)	2008	Teaching Also for Fabrication Occupational Area.	753011	\$134.65
Basic Principles for Construction (2nd ed.): e.resource (Windows 2000 / Windows XP / Window Vista Version) <i>Residential Construction Academy</i>	2008	Teaching	753042	\$188.35
House Wiring (2nd ed.): Instructor's Resource Guide <i>Residential Construction Academy</i>	2008	Teaching Also for Electro-Technologies Occupational Area.	753040	\$28.80



# Electro- Technologies



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# Career and Technology Studies

## Trades, Manufacturing & Transportation: Electro-Technologies

Series / Title	Copyright Date	Status / Course(s)	LRC Order No.	Price
<b>Basic Resources</b>				
Electrical Wiring Residential (4th Canadian ed.) (Student Text) (includes: Updated Blueprint Set)	2007	Basic Also for Construction Occupational Area.	753043	\$93.70
Electricity: Principles & Applications (7th ed.) (Student Text + MultiSim CD-ROM)	2008	Basic	753012	\$134.95
Electronics: Principles & Applications (7th ed.) (Student Text)	2008	Basic	752982	\$132.00
Grob's Basic Electronics (10th ed.) (Student Text with Windows Version CD-ROM)	2007	Basic	752996	\$157.65
House Wiring (2nd ed.) (Student Text) <i>Residential Construction Academy</i>	2008	Basic Also for Construction Occupational Area.	753039	\$93.65
<b>Support Resources</b>				
Electronics: Principles & Applications (7th ed.): Experiments Manual (with MultiSim Windows Version CD-ROM)	2008	Support	752983	\$71.50
<b>Teaching Resources</b>				
Electrical Wiring Residential (4th Canadian ed.): Instructor's Resource CD-ROM	2007	Teaching Also for Construction Occupational Area.	753044	\$134.75
Electricity: Principles & Applications (7th ed.): Experiments Manual with MultiSim CD-ROM (Windows Version)	2008	Teaching	753013	\$60.50
Electricity: Principles & Applications (7th ed.): Instructor's Testing and Resource CD-ROM (Windows Version)	2008	Teaching	753014	\$21.75
Electronics: Principles & Applications (7th ed.): Instructor's Testing and Resource CD-ROM	2008	Teaching	752984	\$22.60
Grob's Basic Electronics (10th ed.): Experiments Manual (with Windows Version CD-ROM)	2007	Teaching	752997	\$83.25
Grob's Basic Electronics (10th ed.): Problems Manual	2007	Teaching	752998	\$80.45
Handi-Guide to Alberta's OH & S Act, Regulation and Code (2nd ed.)	2006	Teaching Also for Construction, Fabrication, Logistics and Mechanics Occupational Areas.	653130	\$35.30
SAFESTART: Advanced Safety Awareness Training (2nd Ed.) (Kit)	2007	Teaching Also for Construction, Fabrication, Logistics and Mechanics Occupational Areas.	Pending	
House Wiring (2nd ed.): Instructor's Resource Guide <i>Residential Construction Academy</i>	2008	Teaching Also for Construction Occupational Area.	753040	\$28.80



# Fabrication



May 2009 (Draft)



# Career and Technology Studies

## Trades, Manufacturing & Transportation: Fabrication

Series / Title	Copyright Date	Status / Course(s)	LRC Order No.	Price
<b>Basic Resources</b>				
Modern Welding: Complete Coverage of the Welding Field in One Easy-to-Use Volume! (Student Text)	2004	Basic	623331	\$76.15
Technology: Engineering & Design (6th ed.) (Student Text)	2008	Basic Also for Construction Occupational Area.	753007	\$65.10
Welding Print Reading (Student Text)	2007	Basic	753032	\$70.85
Welding Technology Fundamentals (Student Text)	2005	Basic	640129	\$69.35
<b>Support Resources</b>				
Gas Metal Arc Welding Handbook (5th ed.) (Student Text)	2008	Support	753026	\$46.40
Gas Tungsten Arc Welding Handbook	2006	Support	753028	\$41.65
Metallurgy Fundamentals (Student Text)	2005	Support	640145	\$69.40
Modern Welding: Complete Coverage of the Welding Field in One Easy-to-Use Volume! Laboratory Manual	2004	Support	623349	\$25.15
Technology: Engineering & Design (6th ed.): Workbook	2008	Support Also for Construction Occupational Area.	753008	\$25.75
Welding Projects	2005	Support	640137	\$30.10
Welding Technology Fundamentals: Laboratory Manual	2005	Support	640179	\$25.00
Manufacturing <i>Career Clusters 2</i>	2004	Support	752504	\$126.20
Auto Shop Safety <i>Workshop Safety</i>	2007	Support Also for Mechanics Occupational Area.	734922	\$16.00
Safety in the Woodshop <i>Workshop Safety</i>	2007	Support Also for Construction Occupational Area.	734914	\$16.00
Welding Class <i>Workshop Safety</i>	2007	Support	734906	\$16.00
<b>Teaching Resources</b>				
Gas Metal Arc Welding Handbook (5th ed.): Instructor's Guide	2008	Teaching	753027	\$18.55
Gas Tungsten Arc Welding: Instructor's Guide	2006	Teaching	753029	\$15.15

# Career and Technology Studies (continued)

## Trades, Manufacturing & Transportation: Fabrication

Series / Title	Copyright Date	Status / Course(s)	LRC Order No.	Price
Handi-Guide to Alberta's OH & S Act, Regulation and Code (2nd ed.)	2006	Teaching Also for Construction, Electro-Technologies, Logistics and Mechanics Occupational Areas.	653130	\$35.30
Health & Safety Tool Kit for Alberta Auto & Truck Dealerships	2007	Teaching Also for Construction, Logistics and Mechanics Occupational Areas.	Pending	
Machines Trades Printreading (with CD-ROM Windows Version 2.2)	2005	Teaching	753030	\$47.90
Modern Welding: Complete Coverage of the Welding Field in One Easy-to-Use Volume! Instructor's Resource	2004	Teaching	623357	\$95.90
Modern Welding: Complete Coverage of the Welding Field in One Easy-to-Use Volume! Instructor's Resource Binder	2004	Teaching	623365	\$201.30
Modern Welding: Complete Coverage of the Welding Field in One Easy-to-Use Volume! Instructor's Resource CD with G-W Test Creation Software	2004	Teaching	623373	\$286.05
SAFESTART: Advanced Safety Awareness Training (2nd Ed.) (Kit)	2007	Teaching Also for Construction, Electro-Technologies, Logistics and Mechanics Occupational Areas.	Pending	
Technology: Engineering & Design (6th ed.): Teacher Annotated Edition	2008	Teaching Also for Construction Occupational Area.	753009	\$111.05
Technology: Engineering & Design (6th ed.): Teacher Resource CD-ROM (Windows / Macintosh Version)	2008	Teaching Also for Construction Occupational Area.	753010	\$267.65
Technology: Engineering & Design (6th ed.): Vocabulary Puzzlemaker CD-ROM (Windows / Macintosh Version 3.1)	2008	Teaching Also for Construction Occupational Area.	753011	\$134.65
Welding Print Reading: Instructor's Guide	2007	Teaching	753033	\$33.95
Welding Technology Fundamentals: Instructor's Manual	2005	Teaching	640153	\$63.00
Welding Technology Fundamentals: Instructor's Resource CD	2005	Teaching	708480	\$248.15

# Logistics



May 2009 (Draft)



# Career and Technology Studies

## Trades, Manufacturing & Transportation: Logistics

Series / Title	Copyright Date	Status / Course(s)	LRC Order No.	Price
<b>Support Resources</b>				
Transportation, Distribution and Logistics <i>Career Clusters 2</i>	2004	Support	752501	\$151.95
<b>Teaching Resources</b>				
Handi-Guide to Alberta's OH & S Act, Regulation and Code (2nd ed.)	2006	Teaching Also for Construction, Electro- Technologies, Fabrication and Mechanics Occupational Areas.	653130	\$35.30
Health & Safety Tool Kit for Alberta Auto & Truck Dealerships	2007	Teaching Also for Construction, Fabrication and Mechanics Occupational Areas.	Pending	
SAFESTART: Advanced Safety Awareness Training (2nd Ed.) (Kit)	2007	Teaching Also for Construction, Electro- Technologies, Fabrication and Mechanics Occupational Areas.	Pending	



# Mechanics



May 2009 (Draft)



# Career and Technology Studies

## Trades, Manufacturing & Transportation: Mechanics

Series / Title	Copyright Date	Status / Course(s)	LRC Order No.	Price
<b>Basic Resources</b>				
Automotive Encyclopedia (Student Text)	2006	Basic	753045	\$78.05
Automotive Excellence: Volume 1 (Student Book)	2007	Basic	753471	\$58.40
Automotive Excellence: Volume 2 (Student Book)	2007	Basic	753473	\$58.40
CDX Automotive Resource Kit Plus (PC Version 4.2)	2007	Basic	709058	\$6070.00
Diesel Technology: Fundamentals, Service, Repair (7th ed.) (Student Text)	2007	Basic	753022	\$78.50
Modern Automotive Technology (Student Text)	2004	Basic	529191	\$139.60
Small Gas Engines: Fundamentals, Service, Troubleshooting, Repair, Applications (Student Text)	2004	Basic	529977	\$77.80
<b>Support Resources</b>				
Automotive Encyclopedia: Study Guide	2005	Support	753046	\$22.90
Automotive Excellence: Academic Applications (Student Edition)	2007	Support	753476	\$30.05
Automotive Excellence: Technical Applications (Volume 1)	2007	Support	753474	\$30.30
Automotive Excellence: Technical Applications (Volume 2)	2007	Support	753475	\$30.30
Diesel Technology: Fundamentals, Service, Repair (7th ed.): Workbook	2007	Support	753024	\$21.50
Modern Automotive Technology: Workbook	2004	Support	529208	\$20.85
Small Gas Engines: Fundamentals, Service, Troubleshooting, Repair, Applications: Workbook	2004	Support	529985	\$17.70
Auto Shop Safety <i>Workshop Safety</i>	2007	Support Also for Fabrication Occupational Area.	734922	\$16.00


# Career and Technology Studies (continued)

## Trades, Manufacturing & Transportation: Mechanics

Series / Title	Copyright Date	Status / Course(s)	LRC Order No.	Price
<b>Teaching Resources</b>				
Automotive Encyclopedia: Instructor's Manual	2006	Teaching	753047	\$74.75
Automotive Excellence: Academic Applications: Instructor Annotated Edition	2007	Teaching	753477	\$53.85
Automotive Excellence: Instructor Resource CD-ROMs: Volumes 1 and 2 (Windows Version)	2007	Teaching	753479	\$267.65
Automotive Excellence: Vocabulary Puzzlemaker Volume 1 (Windows / Macintosh Version 3.1)	2007	Teaching	753871	\$134.65
Diesel Technology: Fundamentals, Service, Repair (7th ed.): Instructor's Manual	2007	Teaching	753025	\$65.05
Handi-Guide to Alberta's OH & S Act, Regulation and Code (2nd ed.)	2006	Teaching Also for Construction, Electro-Technologies, Fabrication and Logistics Occupational Areas.	653130	\$35.30
Health & Safety Tool Kit for Alberta Auto & Truck Dealerships	2007	Teaching Also for Construction, Fabrication and Logistics Occupational Areas.	Pending	
Modern Automotive Technology: Instructor's Manual	2004	Teaching	529224	\$88.70
Modern Automotive Technology: Instructor's Resource Binder	2004	Teaching	529448	\$232.00
SAFESTART: Advanced Safety Awareness Training (2nd Ed.) (Kit)	2007	Teaching Also for Construction, Electro-Technologies, Fabrication and Logistics Occupational Areas.	Pending	
Small Gas Engines: Fundamentals, Service, Troubleshooting, Repair, Applications: Instructor's Manual	2004	Teaching	530031	\$59.15

# Trades, Manufacturing & Transportation (TMT)

**Annotated Bibliography  
(Listed Alphabetically by Title)**

 Grades 10–12

May 2009 (Draft)



## Annotated Bibliography Listed Alphabetically by Title

- **Automotive Encyclopedia (Student Text)**
- **Automotive Encyclopedia: Study Guide**
- **Automotive Encyclopedia: Instructor's Manual**

LRC Order No.:	Est. Price:
<b>753045</b>	<b>\$78.05</b>
<b>753046</b>	<b>\$22.90</b>
<b>753047</b>	<b>\$74.75</b>

Basic / Support / Teaching Resource      Grade(s) 10, 11, 12



Construction	Electro-Technologies	Fabrication	Logistics	Mechanics
				✓

*Automotive Encyclopedia* is a textbook designed for use with a student workbook and an instructor's manual.

The textbook is organized with content that is current. A unit on safety promotes proper safety practices, including use of personal protective equipment. The workbook uses wording directly from the textbook so students can easily locate answers. It provides illustrations to support the textbook information. The study guide in the workbook has a variety of assessment methods, including multiple-choice tests, diagram labeling and fill-in-the-blank worksheets.

The instructor's manual provides a variety of teaching tools and assessment practices. It provides answers to quizzes, chapter review questions and workbook questions.

**Comments:**

- This is an American resource, so information on Canadian safety laws will have to be incorporated.

©2006 Author(s): Toboldt, W. et al.

- **Automotive Excellence: Volume 1 (Student Book)**
- **Automotive Excellence: Volume 2 (Student Book)**
- **Automotive Excellence: Technical Applications (Volume 1)**
- **Automotive Excellence: Technical Applications (Volume 2)**
- **Automotive Excellence: Academic Applications (Student Edition)**
- **Automotive Excellence: Academic Applications: Instructor Annotated Edition**
- **Automotive Excellence: Instructor Resource CD-ROMs: Volumes 1 and 2 (Windows Version)**
- **Automotive Excellence: Vocabulary Puzzlemaker Volume 1 (Windows / Macintosh Version 3.1)**

LRC Order No.:	Est. Price:
753471	\$58.40
753473	\$58.40
753474	\$30.30
753475	\$30.30
753476	\$30.05
753477	\$53.85
753479	\$267.65
753871	\$134.65

Basic / Support / Teaching Resource      Grade(s) 10, 11, 12



Construction	Electro-Technologies	Fabrication	Logistics	Mechanics
				✓



*Automotive Excellence* is a comprehensive resource that includes two student texts, two student workbooks, student and instructor academic applications books, and three instructor's CDs.

The student texts cover material for mechanical and auto service courses. Knowledge checks, step-by-step instructions, a review and tests are provided for every chapter. A unit on career development and related employability skills will help students explore many related career paths. Safety is a priority throughout each unit; modeled safety practices and highlighted safety notices are provided. General service and repair procedures are presented in detail.

The student technical applications workbooks provide worksheets and checklists for student use.

The student academic applications book provides a number of cross-curricular worksheets and activities in mathematics, science and communication that can help make core subject courses more relevant to the student. The instructor's academic applications book provides answer keys.

The instructor's CDs provide printable teacher guides, PowerPoint presentations and quiz and puzzle maker programs.

**Comments:**

- This is an American resource, so it will need to be supplemented with information on Canadian measurement, safety laws and codes for WHMIS and OHS.
- This resource is not compatible with Macintosh applications.
- Exam View application can only be used by one user at a time.

©2007

**Residential Construction Academy**• **Basic Principles for Construction (2nd ed.) (Student Text)****753041      \$59.95**• **Basic Principles for Construction (2nd ed.): e.resource (Windows 2000 / Windows XP / Window Vista Version)****753042      \$188.35**

Support / Teaching Resource      Grade(s) 10, 11, 12



Construction	Electro-Technologies	Fabrication	Logistics	Mechanics
✓				



*Basic Principles for Construction* is a student text designed for use with a teacher resource DVD. The student text provides a broad range of topics for introductory construction courses. Included are the core academic areas that are necessary for success in the field. Topics include work ethic, math, communications, print reading, safety and personal protective equipment. A table of contents, reference section and glossary of terms are included. End-of-chapter activities and review questions are available for each application. The DVD includes PowerPoint presentations, a question bank, an image collection and online resources. The DVD enhances and extends the information provided in the student text.

**Comments:**

- Exam View installed on Vista can only be used by a single user.

©2008 Author(s): Huth, M.

**Building Construction Illustrated (4th ed.)****752910      \$51.45**

Teaching Resource      Grade(s) 10, 11, 12



Construction	Electro-Technologies	Fabrication	Logistics	Mechanics
✓				

*Building Construction Illustrated* provides comprehensive coverage of many different construction areas, using concise descriptions and illustrations of residential and commercial building practices. The resource is suitable for introductory, intermediate and advanced construction courses. A table of contents, reference section and glossary of terms are included in the text, as are excellent line drawings that will be useful in creating teacher-generated assignments.

©2008 Author(s): Ching, F.

LRC Order No.: Est. Price:  
**753031      \$28.40**

## Canadian Wood-Frame House Construction (3rd ed. Revised)

Teaching Resource      Grade(s) 10, 11, 12



Construction	Electro-Technologies	Fabrication	Logistics	Mechanics
✓				

*Canadian Wood-Frame House Construction* is a student text that covers a broad range of outcomes for basic, intermediate and advanced construction courses. Topics include concrete work, footings and foundations; framing all parts of the house; roof sheathings; exterior finishes, trims and millwork; plumbing, heating and wiring; vapour and air barriers; insulation, fire and sound control; ventilation; interior wall and ceiling finishes; floor coverings; and stairs, eaves and chimneys.

**Comments:**

- The building construction information reflects the National Building Code of Canada. The Alberta Building Code may be different for climate and soil conditions.

©2006 Author(s): Burrows, J.

## CDX Automotive Resource Kit Plus (PC Version 4.2)

**709058      \$6070.00**

Basic Resource      Grade(s) 10, 11, 12



Construction	Electro-Technologies	Fabrication	Logistics	Mechanics
				✓

This newly updated resource contains concise, visually appealing video clips with information that can be supported by a teacher. The clips run either on a PC or DVD player and are logically organized. The self-paced nature of the PC version will be useful for students who wish to review the concepts to gain full understanding. The PC format includes print resources that a student can use along with knowledge check questions to verify understanding. The DVD version provides a link to the online textbook provided by CDX with the same print material that is available on the PC version. The resources are visual and the short clips are ideally suited to a senior high school automotive service program. A teacher could use the clips to develop an electronic slide show. CDX provides a program to easily access and save clips and integrate them into Microsoft PowerPoint. The material provided in both versions deals with most of the required curriculum for all automotives classes. An online version of this resource is available.

**Comments:**

- The resource requires up-to-date technology in the classroom.
- Teachers should be familiar with national, provincial and local health-and-safety-related agencies, departments and organizations, e.g., research agencies for related duties and responsibilities such as the Workers' Compensation Board (WCB) and Occupational Health and Safety (OHS), as they relate to the content of this resource for their instructional area.

©2007

**Deconstruction: The Science of Building a House**

- **Foundation to Roof**
- **Plumbing to Paint**

**752449     \$151.95**  
**752453     \$151.95**

Support Resource     Grade(s) 10, 11, 12



Construction	Electro-Technologies	Fabrication	Logistics	Mechanics
✓				

*Deconstruction: The Science of Building a House* is a DVD series for introductory, intermediate and advanced courses that contains concise depictions of trade practices related to residential construction and materials. The series is useful for general instructional purposes and includes an appropriate language level for senior high school students. The DVDs provide supplementary information pertaining to building materials and properties and depict an easy-to-understand process for manufacturing homes—from raw material processing to finished construction.

©2004

- **Diesel Technology: Fundamentals, Service, Repair (7th ed.) (Student Text)**
- **Diesel Technology: Fundamentals, Service, Repair (7th ed.): Workbook**
- **Diesel Technology: Fundamentals, Service, Repair (7th ed.): Instructor's Manual**

**753022     \$78.50**  
**753024     \$21.50**  
**753025     \$65.05**

Basic / Support / Teaching Resource     Grade(s) 10, 11, 12



Construction	Electro-Technologies	Fabrication	Logistics	Mechanics
				✓

*Diesel Technology* includes a student text, a student workbook and an instructor's manual.

The student text provides in-depth and comprehensive coverage of specific diesel engine theory and service and includes review questions at the end of each chapter. A unit on career preparation allows students to explore many related job fields and career paths. General service and repair procedures are presented in detail, many with step-by-step instructions and pictures.

The student workbook corresponds with the text chapters. Questions have been designed so that students are required to fill in the blanks or provide short answers.

The instructor's manual provides transparencies.

**Comments:**

- This is an American resource, so content will need to be supplemented with Canadian safety information.

©2007 **Author(s):** Norman, A; Corinchock, J.

LRC Order No.: Est. Price:  
**753043 \$93.70**  
**753044 \$134.75**

- **Electrical Wiring Residential (4th Canadian ed.) (Student Text) (includes Updated Blueprint Set)**
- **Electrical Wiring Residential (4th Canadian ed.): Instructor's Resource CD-ROM**

Basic / Teaching Resource      Grade(s) 10, 11, 12



Construction	Electro-Technologies	Fabrication	Logistics	Mechanics
✓	✓			



*Electrical Wiring: Residential* consists of a student text and an instructor's manual that are based on the 2006 edition of the Canadian Electrical Code, Part I: Safety Standard for Electrical Installations. The student text is divided into 25 units covering all aspects of residential electrical wiring. At the end of every unit, review questions are provided. A CD-ROM contains files for the instructor's manual with unit answers and student blueprints to be used in drawing electrical circuits. Many examples of basic residential electrical circuits are provided.

©2007 Author(s): Mullin, R. et al.

- **Electricity: Principles & Applications (7th ed.) (Student Text + MultiSim CD-ROM)**      **753012 \$134.95**
- **Electricity: Principles & Applications (7th ed.): Experiments Manual with MultiSim CD-ROM (Windows Version)**      **753013 \$60.50**
- **Electricity: Principles & Applications (7th ed.): Instructor's Testing and Resource CD-ROM (Windows Version)**      **753014 \$21.75**

Basic / Teaching Resource      Grade(s) 10, 11, 12



Construction	Electro-Technologies	Fabrication	Logistics	Mechanics
	✓			



*Electricity Principles & Applications* is a student text designed for use with an experiments manual and instructor's CD-ROM.

The student text is organized by chapters that contain objectives, terms, examples, knowledge check problems and self-review. The student text also includes a background on scientists and engineers whose discoveries and theories helped in the development of electronics. At the end of each chapter is a chapter summary, related formulas, self-tests, critical thinking problems and answers to self-tests.

The experiments manual contains tests and labs for each chapter and includes a MultiSIM CD-ROM.

**Comments:**

- To use some of the electronic enhancement in this resource, the MultiSIM version 7 or 8 program must be available to students and teachers. This resource is not compatible with Macintosh applications.

©2008 Author(s): Fowler, R.

LRC Order No.: Est. Price:  
**752982 \$132.00**  
**752983 \$71.50**  
**752984 \$22.60**

- **Electronics: Principles & Applications (7th ed.) (Student Text)**
- **Electronics: Principles & Applications (7th ed.): Experiments Manual (with MultiSim Windows Version CD-ROM)**
- **Electronics: Principles & Applications (7th ed.): Instructor's Testing and Resource CD-ROM**

Basic / Support / Teaching Resource      Grade(s) 10, 11, 12



Construction	Electro-Technologies	Fabrication	Logistics	Mechanics
	✓			



*Electronics Principles & Applications* is a student text designed for use with an experiments manual and instructor's CD-ROM.

The student text is organized by chapters that contain objectives, terms, self-tests, examples, knowledge check problems and self-review. At the end of each chapter is a chapter summary, related formulas, review questions, critical thinking questions and answers to the self-test within the chapter.

The experiments manual contains tests and labs for each chapter and includes a MultiSIM CD-ROM.

The instructor's CD-ROM includes a test bank and PowerPoint presentations for each chapter.

**Comments:**

- To use some of the electronic enhancement in this resource, the MultiSIM version 7 or 8 program must be available to students and teachers. This resource is not compatible with Macintosh applications.

©2008 Author(s): Schuler, C.

- **Gas Metal Arc Welding Handbook (5th ed.) (Student Text)** **753026 \$46.40**
- **Gas Metal Arc Welding Handbook (5th ed.): Instructor's Guide** **753027 \$18.55**

Support / Teaching Resource      Grade(s) 10, 11, 12



Construction	Electro-Technologies	Fabrication	Logistics	Mechanics
		✓		

*Gas Metal Arc Welding Handbook* is a student text designed for use with an instructor's guide. The student text provides thorough coverage of both basic skills and advanced techniques and includes clearly written content and many illustrations. The text is written at an appropriate reading level for senior high school students. The instructor's guide is a helpful support to the student text.

**Comments:**

- This is an American resource, so content will have to be supplemented with Canadian information.

©2008 Author(s): Minnick, W.H.

LRC Order No.: Est. Price:  
**753028 \$41.65**  
**753029 \$15.15**

- **Gas Tungsten Arc Welding Handbook**
- **Gas Tungsten Arc Welding: Instructor's Guide**

Support / Teaching Resource    Grade(s) 10, 11, 12



Construction	Electro-Technologies	Fabrication	Logistics	Mechanics
		✓		

*Gas Tungsten Arc Welding* is a student text, designed for use with an instructor's guide, on how to complete a gas tungsten weld. There are excellent illustrations to aid students in the understanding of a weld process. The instructor's guide has supportive blackline masters.

**Comments:**

- This resource uses American imperial measurement and will have to be supplemented with metric conversions.

©2006 Author(s): Minnick, W.

- **Grob's Basic Electronics (10th ed.) (Student Text with Windows Version CD-ROM)** **752996 \$157.65**
- **Grob's Basic Electronics (10th ed.): Problems Manual** **752998 \$80.45**
- **Grob's Basic Electronics (10th ed.): Experiments Manual (with Windows Version CD-ROM)** **752997 \$83.25**

Basic / Teaching Resource    Grade(s) 10, 11, 12



Construction	Electro-Technologies	Fabrication	Logistics	Mechanics
	✓			



*Grob's Basic Electronics* is a student text designed for use with an experiments manual and a problems manual.

The student text is organized by chapters that contain objectives, terms, examples, knowledge check problems, self-review and MultiSIM activities. The text also includes a background on scientists and engineers whose discoveries and theories helped in the development of electronics. At the end of each chapter is a chapter summary, related formulas, a self-test, questions, critical thinking problems and answers to knowledge check problems and self-review questions.

The experiments manual and accompanying student CD are set up so that students have the option for nearly every experiment to be worked on in simulation form with MultiSIM, or as a regular hands-on lab.

The problems manual provides the instructor with theoretical problems and an answer key.

**Comments:**

- To use some of the electronic enhancement in this resource, the MultiSIM version 7 or 8 program must be available to students and teachers. This resource is not compatible with Macintosh applications.

©2007 Author(s): Schultz, M.

LRC Order No.: Est. Price:  
**653130 \$35.30**

## Handi-Guide to Alberta's OH & S Act, Regulation and Code (2nd ed.)

Teaching Resource Grade(s) 10, 11, 12



Construction	Electro-Technologies	Fabrication	Logistics	Mechanics
✓	✓	✓	✓	✓

The *Handi-Guide to Alberta's OH & S Act, Regulation and Code* resource introduces teachers to safety standards and procedures for workplace safety. The resource covers the identification of roles and responsibilities, how to assess, eliminate and control risks, and the identification of occupational health and safety requirements applicable to all industries. This resource provides teachers with the occupational health and safety framework that can be modeled and reinforced with students in their classrooms.

**Comments:**

- Teachers should be familiar with current national, provincial and local health and safety-related agencies, departments and organizations, e.g., research agencies for related duties and responsibilities, such as the Workers' Compensation Board (WCB) and Occupational Health and Safety (OHS), as they relate to the content of this resource for their instructional area.
- This safety resource is also authorized for CTR1010.

©2006

## Health & Safety Tool Kit for Alberta Auto & Truck Dealerships

**Pending**

Teaching Resource Grade(s) 10, 11, 12



Construction	Electro-Technologies	Fabrication	Logistics	Mechanics
✓		✓	✓	✓

The *Health & Safety Tool Kit for Alberta Auto & Truck Dealerships* Instructional Manual provides practical tools that can be used by teachers to share information about health and safety in the field of auto and truck dealerships complying with the basic elements of the *Occupational Health and Safety (OHS) Act, Regulation and Code*. The main sections include responsibilities, hazard assessment and control, an appendix of resources and a worksite inspection checklist linked to the *OHC Code and Regulations*.

**Comments:**

- Teachers should be familiar with national, provincial and local health-and-safety-related agencies, departments and organizations; e.g., research agencies for related duties and responsibilities, such as the Workers' Compensation Board (WCB) and Occupational Health and Safety (OHS), as they relate to the content of this resource for their instructional area.

©2007

**Residential Construction Academy**

- **House Wiring (2nd ed.) (Student Text)**
- **House Wiring (2nd ed.): Instructor's Resource Guide**

**753039      \$93.65****753040      \$28.80**

Basic / Teaching Resource      Grade(s) 10, 11, 12



Construction	Electro-Technologies	Fabrication	Logistics	Mechanics
✓	✓			

*House Wiring (2nd Ed.)* consists of a student text and an instructor's guide. The student text is organized in the same way that a typical residential wiring project unfolds, starting with preparing and planning a residential wiring job, placing service entrances and equipment, roughing in, placing all electrical devices and troubleshooting. Each chapter has a glossary and a list of common hand tools, and safety procedures are highlighted.

The instructor's resource guide provides chapter outcomes, answers to chapter review questions and a final exam with an answer key.

**Comments:**

- The electrical safety code used is the National Electrical Code or NEC (USA-based), so information on the Canadian Electrical Code will have to be incorporated.

©2008 Author(s): Fletcher, G.

**Machines Trades Printreading (with CD-ROM Windows Version 2.2)****753030      \$47.90**

Teaching Resource      Grade(s) 10, 11, 12



Construction	Electro-Technologies	Fabrication	Logistics	Mechanics
		✓		



*Machine Trades: Print Reading* is a student text designed for use with a student/teacher CD-ROM.

The student text introduces standards and procedures for print reading. The new edition reflects current machine-shop practices. Graphics are in black and white.

The CD-ROM provides additional instructional support for Fabrication Studies classes that have access to computers.

**Comments:**

- American content will need to be supplemented with Canadian content.
- This resource is not compatible with Macintosh applications.

©2005 Author(s): Proctor, T. et al.

## Career Clusters 2 Manufacturing

752504 \$151.95

Support Resource Grade(s) 10, 11, 12

Construction	Electro-Technologies	Fabrication	Logistics	Mechanics
		✓		



*Career Clusters 2* is a DVD series that demonstrates relevant roles and skills in a workplace, as identified by experts who work in the field, which can assist students in creating and identifying career pathways. Topics include a job description, educational requirements and working hours. *Manufacturing* introduces students to the roles and responsibilities of a Tool and Die Maker, Precision Assembler, Welder and Industrial Production Manager.

©2004

## Metallurgy Fundamentals (Student Text)

640145 \$69.40

Support Resource Grade(s) 10, 11, 12

Construction	Electro-Technologies	Fabrication	Logistics	Mechanics
		✓		



*Metallurgy Fundamentals* provides comprehensive instruction on the basic principles of metallurgy and explores the reasons for the ways that metals behave when heated and cooled. It also explains why certain material properties are desired and how these properties are attained. The resource makes use of photographs and drawings to help the reader understand this complex topic.

©2005 Author(s): Brandt, D.; Warner, J.C.

- **Modern Automotive Technology (Student Text)**
- **Modern Automotive Technology: Workbook**
- **Modern Automotive Technology: Instructor's Manual**
- **Modern Automotive Technology: Instructor's Resource Binder**

LRC Order No.:	Est. Price:
529191	\$139.60
529208	\$20.85
529224	\$88.70
529448	\$232.00

Basic / Support / Teaching Resource      Grade(s) 10, 11, 12



Construction	Electro-Technologies	Fabrication	Logistics	Mechanics
				✓

*Modern Automotive Technology* includes a student text, a student workbook, an instructor's manual and an instructor's resource binder.

The student text is organized and comprehensive for mechanical and auto service courses. Units on safety, system theory, diagnostics and repair and service are presented in the text. There are many illustrations to support the textual information.

The student workbook uses wording directly from the student text, so students can easily locate the answers.

The instructor's resource binder supports the instructor's manual and provides answers to quizzes, chapter review questions and workbook questions. Blackline masters and colour transparencies are included.

**Comments:**

- As this is an American resource, information on Canadian laws and codes will have to be incorporated.

©2004    **Author(s):** Duffy, J.E.

- **Modern Cabinetmaking (Student Text)**
- **Modern Cabinetmaking: Workbook**
- **Modern Cabinetmaking: Instructor's Manual**

642597	\$87.00
642604	\$22.70
642612	\$27.35

Basic / Support / Teaching Resource      Grade(s) 10, 11, 12



Construction	Electro-Technologies	Fabrication	Logistics	Mechanics
✓				

*Modern Cabinetmaking* consists of a text, student manual and teacher resource. It covers a broad range of outcomes for construction technology introductory and intermediate courses. It is organized and useful for general instructional purposes with an appropriate reading level for senior high school students. The text provides graphics and line drawings. A table of contents, reference section and glossary of terms are included in the resource. This resource should be used in conjunction with projects and assignments designed by the instructor in order to meet all outcomes. This resource has a useful student workbook with material supply project assignments.

©2005    **Author(s):** Umstatted, W.; Davis, C.

LRC Order No.: Est. Price:  
**753455 \$72.85**  
**753456 \$22.90**  
**753458 \$269.90**

- **Modern Plumbing (Student Text)**
- **Modern Plumbing: Job Practice Manual**
- **Modern Plumbing: Instructor's Resource CD (Windows Version)**

Basic / Support / Teaching Resource    Grade(s) 10, 11, 12



Construction	Electro-Technologies	Fabrication	Logistics	Mechanics
✓				



*Modern Plumbing* consists of a text, student manual and teacher resource DVD. The DVD includes teaching suggestions, quizzes, masters, Internet resources and lesson plans and also covers a broad range of outcomes for the intermediate course. The textbook is organized and useful for general instructional purposes with an appropriate reading level for senior high school students. The text provides graphics and line drawings. A table of contents, reference section and glossary of terms are included in the resource. The DVD enhances and extends the information provided by the text. This resource should be used in conjunction with projects and assignments designed by the instructor in order to meet the course outcomes. The resource includes a section on trade math and covers safety and personal protective equipment. The resource also provides informative graphics and terminology related to plumbing. A resource text for teachers is also available.

**Comments:**

- The Workplace Hazardous Materials Information System (WHMIS) and Occupational Health and Safety (OHS) standards are to be followed in conjunction with the text.
- This DVD is not compatible with Macintosh applications.
- Exam view installed on Windows XP can be used by a single user only.

©2005 **Author(s):** Blankenbaker, E.

	LRC Order No.:	Est. Price:
• <b>Modern Welding: Complete Coverage of the Welding Field in One Easy-to-Use Volume! (Student Text)</b>	623331	\$76.15
• <b>Modern Welding: Complete Coverage of the Welding Field in One Easy-to-Use Volume! Laboratory Manual</b>	623349	\$25.15
• <b>Modern Welding: Complete Coverage of the Welding Field in One Easy-to-Use Volume! Instructor's Resource CD with G-W Test Creation Software</b>	623373	\$286.05
• <b>Modern Welding: Complete Coverage of the Welding Field in One Easy-to-Use Volume! Instructor's Resource</b>	623357	\$95.90
• <b>Modern Welding: Complete Coverage of the Welding Field in One Easy-to-Use Volume! Instructor's Resource Binder</b>	623365	\$201.30

Basic / Support / Teaching Resource      Grade(s) 10, 11, 12



Construction	Electro-Technologies	Fabrication	Logistics	Mechanics
		✓		



*Modern Welding* is a comprehensive resource that covers safety, theory and a wide variety of welding and cutting processes. The resource includes practical applications that build the skills of a welder.

The student text is clearly formatted with colour visuals and numbered sections. Each chapter has "Test Your Knowledge" questions.

The laboratory manual correlates with the chapters in the student text and includes practical activities for the student.

The instructor's resource guide provides an answer key for the laboratory manual, diagrams for projects and a textbook guide.

The resource binder contains overhead transparencies and the AWS correlation chart, and the CD has G-W test creation software.

©2004 Author(s): Bowditch, W. et al.

- **Modern Woodworking: Tools, Materials, and Processes (Student Text)**
- **Modern Woodworking: Tools, Materials, and Processes: Workbook**
- **Modern Woodworking: Tools, Materials, and Processes: Instructor's Guide**

LRC Order No.:	Est. Price:
<b>753434</b>	<b>\$87.00</b>
<b>753435</b>	<b>\$20.85</b>
<b>753436</b>	<b>\$43.85</b>

Basic / Support / Teaching Resource      Grade(s) 10, 11, 12



Construction	Electro-Technologies	Fabrication	Logistics	Mechanics
✓				

*Modern Woodworking* consists of a text, a student workbook and a teacher resource. It covers a broad range of outcomes for introductory and intermediate courses. It is organized and useful for general instructional purposes. The text provides excellent graphics and line drawings. A table of contents, reference section and glossary of terms are included in the resource. This resource should be used in conjunction with projects and assignments designed by the instructor in order to meet all outcomes.

©2006 Author(s): Wagner, W.; Kicklighter, C.

**SAFESTART: Advanced Safety Awareness Training (2nd Ed.) (Kit)**

Teaching Resource Grade(s) 10, 11, 12



Construction	Electro-Technologies	Fabrication	Logistics	Mechanics
✓	✓	✓	✓	✓

The *SafeStart* resource series includes a leader's guide with an accompanying DVD, five training workbooks, an overview DVD, Video Units 1–5, three support DVDs—On the Road, Taking SafeStart Home and Hurt at Home—and self-check cards. This is a generic safety program appropriate for all areas of Career and Technology Studies. The program aims to create a culture of safety awareness by changing personal behaviour and attitudes toward safety. The content focuses on four personal states—rushing, frustration, fatigue and complacency—that can cause or contribute to the following critical errors that increase the risk of injury: eyes not on task, mind not on task, line of fire and balance/traction/grip. This teacher resource series presents health and safety instruction through five modules that include content and occupational scenarios. This is generally an employee-based program that can be adapted for students. The support DVDs (On the Road, Taking SafeStart Home and Hurt at Home) introduce safety concepts for teenagers, child care and the home, and may also act as resources for parents. An online course format and Web site are available with additional resources.

**Comments:**

- The Advanced Safety Awareness Training DVD has scenarios from industrial plants, hospitals and the home for students to review and discuss with each other.
- The On the Road DVD has concerns using the SafeStart concepts to prevent driving injuries.
- The Taking SafeStart Home DVD discusses safety in the home and is more appropriate for students in junior high school.
- The Hurt at Home DVD is designed for parents to discuss safety with young children.
- This safety program does not discuss safety rules and regulations; rather, it deals with personal behaviour and attitudes to prevent injury.
- Teachers should be familiar with national, provincial and local health and safety-related agencies, departments and organizations, e.g., research agencies for related duties and responsibilities, such as the Workers' Compensation Board (WCB) and Occupational Health and Safety (OHS), as they relate to the content of this resource for their instructional area.
- This safety resource is also authorized for CTR1010.

**Cautions:**

- Teachers should be aware that some terms referring to people with disabilities are inappropriate.
- There is occasional inclusion of some inappropriate language in the scripted scenarios that mention, 'old man', etc. referenced in the resources.

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LRC Order No.: Est. Price:

- **Small Gas Engines: Fundamentals, Service, Troubleshooting, Repair, Applications (Student Text)** 529977 \$77.80
- **Small Gas Engines: Fundamentals, Service, Troubleshooting, Repair, Applications: Workbook** 529985 \$17.70
- **Small Gas Engines: Fundamentals, Service, Troubleshooting, Repair, Applications: Instructor's Manual** 530031 \$59.15

Basic / Support / Teaching Resource Grade(s) 10, 11, 12



Construction	Electro-Technologies	Fabrication	Logistics	Mechanics
				✓

*Small Gas Engines* includes a student text, a student workbook and an instructor's manual. Theory covered includes small engines and basic two- and four-stroke engines.

The student text is organized specifically for small engine technology. It includes information on a range of specific small engine-powered commercial equipment, e.g., lawn care tools, and provides a section on career training. A unit on safety provides many pictorial examples of proper safety practices.

The student workbook follows chapter theory in order and offers a variety of teaching tools and assessment practices.

The instructor's manual has diagrams and pictures that could be made into overhead transparencies.

**Comments:**


- This is an American resource, so content will need to be supplemented with information on Canadian safety standards.

©2004 Author(s): Roth, A.

- |  | LRC Order No.: | Est. Price:     |
|--|----------------|-----------------|
| • <b>Technology: Engineering &amp; Design (6th ed.) (Student Text)</b>   | <b>753007</b>  | <b>\$65.10</b>  |
| • <b>Technology: Engineering &amp; Design (6th ed.): Workbook</b>  | <b>753008</b>  | <b>\$25.75</b>  |
| • <b>Technology: Engineering &amp; Design (6th ed.): Teacher Annotated Edition</b>                                       | <b>753009</b>  | <b>\$111.05</b> |
| • <b>Technology: Engineering &amp; Design (6th ed.): Teacher Resource CD-ROM (Windows / Macintosh Version)</b>           | <b>753010</b>  | <b>\$267.65</b> |
| • <b>Technology: Engineering &amp; Design (6th ed.): Vocabulary Puzzlemaker CD-ROM (Windows / Macintosh Version 3.1)</b> | <b>753011</b>  | <b>\$134.65</b> |

Basic / Support / Teaching Resource      Grade(s) 10, 11, 12

	Construction	Electro-Technologies	Fabrication	Logistics	Mechanics
	✓		✓		

 *Technology: Engineering & Design* (6th Edition) is a comprehensive resource that includes a student text, a student application workbook, a teacher's annotated edition, a teacher resource CD-ROM and a vocabulary puzzle maker CD-ROM.

The student text helps students understand and apply technology presented in an engineering context. It describes the engineering design process and how it is used to solve technological challenges. Students explore the nature of technology and technology systems; the history, evolution and characteristics of technology; and technology's impact on our society, culture, economy, politics and environment. The student text incorporates cross-curricular subjects; math applications, for example, are found throughout.

The student application workbook corresponds with the student text, providing engineering and design applications and activities.

The teacher's annotated edition illustrates how to use the student text. It provides answers to chapter questions and provides suggested course outlines.

The teacher resource CD-ROM provides lesson plans and an exam review suite. A separate vocabulary puzzle maker CD-ROM is also included.

**Comments:**

- American content will need to be supplemented with information on Canadian safety standards.
- The accompanying DVD is not compatible with Macintosh application.
- Exam View Pro when installed on a Windows Platform can only be used by a single user.

©2008 **Author(s):** Brusic, S. et al.

**Career Clusters 2****Transportation, Distribution and Logistics****752501      \$151.95**

Support Resource      Grade(s) 10, 11, 12

Construction	Electro-Technologies	Fabrication	Logistics	Mechanics
			✓	



*Career Clusters 2* is a DVD series that demonstrates relevant roles and skills in a workplace, as identified by experts who work in the field, which can assist students in creating and identifying career pathways. Topics include a job description, educational requirements and working hours. *Transportation, Distribution and Logistics* introduces students to the role and responsibilities of an Urban Planner, Truck Driver: Light and Delivery, Automotive Service Technician and Mechanic.

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- **Welding Print Reading (Student Text)**

**753032      \$70.85**

- **Welding Print Reading: Instructor's Guide**

**753033      \$33.95**

Basic / Teaching Resource      Grade(s) 10, 11, 12



Construction	Electro-Technologies	Fabrication	Logistics	Mechanics
		✓		

*Welding Print Reading* is a student text designed for use with an instructor's guide. The resource covers many aspects of welding print reading and helps students understand and use various types of prints found in the welding industry. Contents include prints, math, welding, metal, types of weld, and symbol usage. The reading level is appropriate for senior high school students. The instructor's guide provides many activities to complement the student text.

©2007 Author(s): Walker, J.; Polanin, W.

**Welding Projects****640137      \$30.10**

Support Resource      Grade(s) 10, 11, 12



Construction	Electro-Technologies	Fabrication	Logistics	Mechanics
		✓		

A collection of 69 projects that require a high level of skill and extensive materials. Projects have a scaled drawing and material list.

**Comments:**

- Imperial measurements will have to be converted to metric.

©2005 Author(s): Ruck, J.

LRC Order No.:	Est. Price:
<b>640129</b>	<b>\$69.35</b>
<b>640179</b>	<b>\$25.00</b>
<b>640153</b>	<b>\$63.00</b>
<b>708480</b>	<b>\$248.15</b>

- **Welding Technology Fundamentals (Student Text)**
- **Welding Technology Fundamentals: Laboratory Manual**
- **Welding Technology Fundamentals: Instructor's Manual**
- **Welding Technology Fundamentals: Instructor's Resource CD**

Basic / Support / Teaching Resource      Grade(s) 10, 11, 12



Construction	Electro-Technologies	Fabrication	Logistics	Mechanics
		✓		



*Welding Technology Fundamentals* consists of a comprehensive, easy-to-read welding textbook, a laboratory manual and an instructor's manual.

The textbook provides information on the equipment and techniques for welding and cutting processes most often used in the industry. These processes are oxyfuel gas cutting, shielded metal arc welding (SMAW), gas metal arc welding (GMAW), fluxcon arc welding and gas tungsten arc welding (GTAW). There is technical information on equipment and supplies, special processes, weld inspecting and testing, drawing interpretation, welding symbols and welder qualification, and the physics of welding. The resource begins with an emphasis on safety, and as each new welding process or concept is introduced, related safety processes are emphasized. The textbook contains information about welding careers.

The laboratory manual contains lessons with objectives and instructions for completing the assigned jobs.

The instructor's manual has a series of quizzes with answer keys.

©2005 **Author(s):** Bowditch, W. et al.

**Wood Finishing**

• Bleaching	752447	\$87.80
• Lacquers and Varnishes	752451	\$81.80
• Oil, Shellac, and Wax	752452	\$81.80
• Painting Wood Furniture	752455	\$81.80
• Preparing Wood	752456	\$81.80
• Refinishing	752446	\$126.20
• Staining Wood	752500	\$81.80

Support Resource    Grade(s) 10, 11, 12



Construction	Electro-Technologies	Fabrication	Logistics	Mechanics
✓				

*Wood Finishing* is a DVD series that provides in-depth information and demonstration concerning all aspects of finishing wood products using a variety of covering materials. Each video is between 20 and 30 minutes in length. Safe procedures are used and shown. A hands-on demonstration for all techniques is illustrated for finishing wood furniture. The titles in the series are: Bleaching; Lacquers and Varnishes; Oil, Shellac, and Wax; Painting Wood Furniture; Preparing Wood; Refinishing; Staining Wood.

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**Woodworking: The Art and the Craft**

• <b>Basic Methods of Measuring and Cutting (DVD)</b>	723371	\$16.00
• <b>Creating Biscuit and Dowel Joints (DVD)</b>	752813	\$16.00
• <b>Creating Dado Joints (DVD)</b>	752815	\$16.00
• <b>Creating Dovetail Joints and Casework (DVD)</b>	752818	\$16.00
• <b>Creating Miter Joints (DVD)</b>	752816	\$16.00
• <b>Creating Mortise-and-Tenon Joints (DVD)</b>	752817	\$16.00
• <b>Creating Rabbet Joints (DVD)</b>	752814	\$16.00
• <b>Finishing Techniques (DVD)</b>	752819	\$16.00
• <b>Gluing and Clamping (DVD)</b>	723173	\$16.00
• <b>Methods of Cutting Circles and Curves (DVD)</b>	752899	\$16.00
• <b>Planing (DVD)</b>	752811	\$16.00
• <b>Ripping and Crosscutting (DVD)</b>	752793	\$16.00
• <b>Sanding (DVD)</b>	752812	\$16.00
• <b>Sawing and Shaping (DVD)</b>	752794	\$16.00
• <b>Working with Nails and Screws (DVD)</b>	723165	\$16.00

Support Resource Grade(s) 10, 11, 12



Construction	Electro-Technologies	Fabrication	Logistics	Mechanics
✓				

Each of the 16-part DVD series focuses on a separate woodworking power tool and shows students the safe way to operate each one. The programs can be used as an introduction or as a refresher and demonstrate correct operation and maintenance, including changing blades, cutters and bits. The woodworking tools covered in the series includes saws (e.g. table, cutoff, radial, band, scroll, jigsaw, circular, reciprocating), routers, jointers, planers, lathes, power nailers, drill presses, sanders, grinders and sharpeners. The resource also provides detailed instructions on how to build a work centre. A teacher's guide is available online.

**Comments:**

- Teachers should be familiar with national, provincial and local health-and-safety-related agencies, departments and organizations; e.g. research agencies for related duties and responsibilities such as the Workers' Compensation Board (WCB) and Occupational Health and Safety (OHS), as they relate to the content of this resource for their instructional area.

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**Workshop Safety**

- |   |               |                |
|---|---------------|----------------|
| • <b>Auto Shop Safety</b> (for Fabrication and Mechanics Occupational Areas)          | <b>734922</b> | <b>\$16.00</b> |
| • <b>Safety in the Woodshop</b> (for Construction and Fabrication Occupational Areas) | <b>734914</b> | <b>\$16.00</b> |
| • <b>Welding Class</b> (for Fabrication Occupational Area)                            | <b>734906</b> | <b>\$16.00</b> |

Support Resource Grade(s) 10, 11, 12



Construction	Electro-Technologies	Fabrication	Logistics	Mechanics
✓		✓		✓

The *Workshop Safety* series includes the following three DVDs: Safety in the Woodshop, Auto Shop Safety and Welding Class. The content identifies general safety in the instructional areas of Auto, Woodshop and Welding. The series targets the following introductory course content: hazards in electrical and gas welding, arc vs. oxyacetylene welding, safe equipment usage, fire safety, power tool usage, fumes and proper ventilation, fire hazards and prevention, wood storage and inspection, equipment usage, material handling and lifting techniques.

**Comments:**

- Teachers should be familiar with national, provincial and local health-and-safety-related agencies, departments and organizations; e.g., research agencies for related duties and responsibilities such as the Workers' Compensation Board (WCB) and Occupational Health and Safety (OHS), as they relate to the content of this resource for their instructional area.
- This safety series is also authorized for CTR1010.

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# Trades, Manufacturing & Transportation (TMT)

## Vendors/Distributors



May 2009 (Draft)



## VENDORS/DISTRIBUTORS

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