

NOTICE TO STUDENTS: Purchase Books and the required Drafting Kit at the school bookstore as they become available. **DO NOT PURCHASE EQUIPMENT OR SUPPLIES MARKED WITH * UNTIL YOU HAVE DISCUSSED THIS LIST WITH YOUR INSTRUCTOR.**

FIRST QUARTER:

GENERAL EQUIPMENT: (Purchase First Quarter) for use in all following quarters:

- *Scientific calculator (See instructor before purchasing)
- *Safety glasses (or safety approved eyeglasses with side shields for shop)
- *Steel tape measure (at least ½" wide x 10' long, any good quality brand)
- Three-ring notebooks (1-1/2" rings, lays flat) (1 per subject - minimum of 2)
- Notebook index dividers (5 tab format), 2 sets for each Three-ring notebook purchased above (10 dividers each notebook)
- *Paper, Engineering grid Notebook paper, 5 squares/in, green, 3-hole punched, with Header rows (see instructor) (will be used in all engineering classes)
- Computer memory device - USB Drive (1 GB Min.)
- Set of personal headphones/buds for training videos (Std. headphone plug)
- *Cam lock (3/4" diameter for 7/8" thick drawer)

FIRST, SECOND, or THIRD QUARTER Drafting Supplies:

(Check your Schedule – the tools in this section will be required for the class called CAD114 Engineering Graphics/CAD 1. This course will be in either your first, second, or third quarter of classes)

DRAFTING EQUIPMENT: (Purchase for your First Engineering Graphics class for use in all following quarters):

Required Drafting Tools: (may be in one drafting kit)

- Small Drafting Triangles (2): professional quality acrylic, (45 X 4", 30/60 X6")**
- Wood drafting pencils (fit regular pencil sharpener), 2H, 4H, 6H (1 each)**
- Eraser (plastic, for drafting film) (Staedtler 526 50X or equivalent)**
- Colored pencils (1) red, (1) blue (general purpose)**
- Circle template, inch sizes (Staedtler 977 110 or equivalent) **
- Kneading eraser (graphite cleaner) **
- Drafting Measuring Scale: Mechanical, 12", (full, half, 50th, mm) (Hearlihy P235MT)**
- Drafting Measuring Scale: Architectural, 12" (Staedtler-Mars 987 19-34 or equivalent) **

**Note: Some tools listed here are available in a kit from the Bookstore – you only need to buy one set of tools. Note: Check contents of any kit. Some years the kit combination may vary and you will need to purchase some items separately – especially mechanical scales.

2018-19 Equipment, Supply, and Book List
CAD Design & Drafting / Mechanical Engineering Technology
Spokane Community College

*Optional Drafting Tools (Only buy these if you would like to have all your own tools to take with you instead of using class tools).

- Large Drafting Triangles (2): professional quality acrylic, (45 X 10", 30/60 X 10")
- 6" drafting compass (professional quality) Alvin 201 or 55140 Staedtler**
- Scales: (1) Civil, 12" (Staedtler-Mars 987 19-34 or equivalent)
- Eraser shield, metal (Staedtler 529 50 or equivalent)**
- Drafting tape, ½" (Scotch 3M #021200-07033 or better, or Drafting "Dots" – no masking tape)
- Sandpaper pad (sharpen compass lead)
- Drafting dusting brush**
- General purpose drafting template (Berol Rapidesign R-18)

SECOND & THIRD QUARTERS:

- Three-ring notebooks (1-1/2" rings, lays flat on desk) (1 per new subject)
- Notebook dividers (recommend 10 dividers for each notebook above)
- *Paper, Engineering grid Notebook paper, 5 squares/in, green, 3-hole punched, with Header rows (see instructor)
- *Computer memory device as required (USB Drive (4GB Min.))
- *Calipers for measuring .001" increments – professional quality, 4" or 6" (can be steel or composite) (***see instructor***)
- *4" or 6" steel rule to measure into 50ths and 64ths (***see instructor***)
- Steel protractor/depth gage (Angle-Finder) (General #19 or better) (***see instructor***)
- Substantial Footwear (Shop Practices & Project Labs) (***see instructor***)
- Optional: *Leather Gloves (Shop Practices & Project Labs) (***see instructor***)

FOURTH, FIFTH & SIXTH QUARTERS:

- Three-ring notebooks (1-1/2" rings, lays flat on desk) (1 per new subject)
- Notebook dividers (10) per notebook above
- *Paper, Engineering grid Notebook paper, 5 squares/in, green, 3-hole punched, with Header rows (see instructor)
- *Computer memory device as required (USB Drive (4 to 8GB Min.))

*** FOR EACH ITEM MARKED WITH AN *, CHECK WITH INSTRUCTOR BEFORE PURCHASING AS OPTIONS OR BRAND NAMES MAY VARY.**

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SCC CAD Design and Drafting; Mechanical Engineering Technology BOOKS:

Books are listed by course number below. Use the CAD or Mechanical Design course schedule to determine which books are required for each quarter.

Note: Prices listed are approximate and may vary depending on where items are purchased.

<u>COURSE TITLE</u>		<u>REQUIRED/OPTIONAL TEXTS</u>
CAD and Mechanical Engineering Tech Courses		
CAD 101	Introduction to Technology	(No new text required)
CAD 111	Applied Technical Math 1	Technical Mathematics
CAD 113	Computer Fundamentals for Engineering	(Check with appropriate instructor)
CAD 114	Engineering Graphics/CAD 1	Engineering Drawing and Design, 6 th Ed Madsen
CAD 120	Basic Blueprint Reading	(Same text as CAD114)
CAD 121	Applied Technical Math 2	(Same text as CAD111)
CAD 124	Engineering Graphics/CAD 2	(Same text as CAD114)
CAD 133	Introduction to Design	(Same text as CAD 114) plus optional: Opt.: Machinery's Handbook (latest ed.)
CAD 137	Applied Tech Math & Physics	(Same text as CAD111)
CAD 141	Shop Practices	(No new text required)
CAD 142	CAD Solid Modeling/Graphics 1	SolidWorks Basic Text (Check with appropriate instructor)
CAD 242	Mechanical Design Fundamentals	Machinery's Handbook, 24th edition or higher
CAD 243	Building Systems Mech CAD Applications	Solid Professor Subscription
CAD 244	Structural CAD Applications	Solid Professor Subscription
CAD 246	Manufacturing Processes/Measuring	(Same text as CAD114)
CAD 251	Applied Tolerancing & GD&T	(Same text as CAD114)
CAD 252	CAD Solid Modeling/Graphics 2	(check with instructor) (includes text from CAD129 and/or CAD142)
CAD 255	Technical Applications 1	(No new text required)
CAD 256	Mechanical CAD Applications	(No new text required)
CAD 258	Schematic CAD Applications	(No new text required)
CAD 260	Fabrication & Piping CAD Applications	(Check with instructor) Opt.: DeWalt Blueprint Reading
CAD 261	Project Design	(No new text required)
CAD 264	Technical Applications II	(No new text required)
CAD 265	Manufacturing & Measuring Systems	(No new text required)
CAD 268	Schematics/Advanced CAD	(Same text as CAD114)
CAD 269	Civil CAD Applications	Structural, Civil, and Pipe Drafting
Non-CAD or MET Courses		
APLED 112	Applied Mathematics	(Check with appropriate instructor)
APLED 121	Applied Written Communications	(Check with appropriate instructor)
APLED 123	Applied Communications	(Check with appropriate instructor)
APLED 125	Employment Prep	(Check with appropriate instructor)
ELMT 112	Electrical Theory	(Check with appropriate instructor)
PHYS 101	Applied Physics	(Check with appropriate instructor)

***Note: For Non-CAD/MET courses, check with appropriate instructor before purchasing books.**