

Woodworking Manufacturing Technologies

FOUR CERTIFICATES OF ACHIEVEMENT ARE AVAILABLE

- WOODWORKING MANUFACTURING TECHNOLOGIES
- CNC WOODWORKING
- CABINETMAKING
- FURNITURE MAKING

ASSOCIATE DEGREES ARE ALSO AVAILABLE

- WOODWORKING MANUFACTURING TECHNOLOGIES (AA)
- CABINETMAKING (AA)
- FURNITURE MAKING (AS)



WOODWORKING MANUFACTURING TECHNOLOGIES CERTIFICATE OF ACHIEVEMENT

• WMT 101	Introduction to
	Woodworking (3 units)Completed 🗆
• WMT 102	Introduction to Solid Wood
	Casegoods (4 units)Completed 🗆
• WMT 103	Introduction to Tables (4 units)Completed
• WMT 107	Wood Finishing (3 Units)Completed 🗆
• WMT 118	Introduction to Woodturning (2 Units)Completed \Box
• WMT 151	Introduction to Faceframe
	Cabinetmaking (4 Units)Completed 🗆
• WMT 153	32mm System of
	Cabinetmaking (4 Units)Completed 🗆
• WMT 155	Architectural Millwork (4 Units)Completed

Total Certificate Requirement: 28 Units

CNC WOODWORKING CERTIFICATE OF ACHIEVEMENT

• WMT 151	Introduction to Faceframe
	Cabinetmaking (4 Units)Completed
• WMT 181	Introduction to Cabinet Vision (3 Units)Completed
• WMT 182	Alphacam and the CNC Router (4 Units) Completed
• WMT 184	Introduction to
	Digital Fabrication (3 Units)Completed
• WMT 281	Intermediate Cabinet Vision (2.5 Units)Completed
• WMT 282	Intermediate Alphacam and the
	CNC Router (4 Units)Completed

Total Certificate Requirement: 20.5 Units

CABINETMAKING CERTIFICATE OF ACHIEVEMENT

•	WMT 151	Introduction to Faceframe	
		Cabinetmaking (4 Units)Completed	
•	WMT 153	32mm System of	
		Cabinetmaking (4 Units)Completed	
·	WMT 155	Architectural Millwork (4 Units)Completed	
•	WMT 181	Introduction to Cabinet Vision (3 Units)Completed	
	or WMT 182	Alphacam and the CNC Router (4 Units)Completed	
•	WMT 250	Intermediate Faceframe	
		Cabinetmaking (4 Units)Completed	
	or WMT 252	Intermediate 32mm System of	
		Cabinetmaking (4 Units)Completed	
•	WMT 291	Production Cabinetmaking (4 Units)Completed	
	or WMT 292	Production – Special Projects (4 Units)Completed	

Choose four (4) units of additional Woodworking classes (See reverse or Catalog for class choices)

Total Certificate Requirement: 27-30 Units

FURNITURE MAKING CERTIFICATE OF ACHIEVEMENT

- WMT 101 Introduction to Woodworking (3 Units).....Completed
 WMT 102 Introduction to Solid Wood Casegoods (4 Units)..Completed
- WMT 103 Introduction to Tables (4 Units)......Completed □
- WMT 107 Wood Finishing (3 Units).....Completed
- WMT 130 Furniture Design (3 Units)Completed 🗆
- WMT 201 Woodworking with Hand Tools (4 Units)Completed

Choose four (4) units of additional Woodworking classes (See reverse or Catalog for class choices)

Total Certificate Requirement: 25 Units

For more information on Certificates and Verifications of Completion, please refer to the current General Catalog: <u>www.cerritos.edu/catalog</u>

<u>Cerritos College</u>

www.cerritos.edu/wood

Woodworking Manufacturing Technologies

Electives: Course #	Course Title	Units
WMT 8012	Running a Woodworking Business	3
WMT 100 ¹	Woodworking Essentials	2
WMT 107 ²	Wood Finishing	3
WMT 1081	Wood Carving for Furniture	2.5
WMT 117 ¹	Woodworking Appreciation	1
WMT 1181	Introduction to Woodturning	2
WMT 144 ¹²	Jigs and Fixtures	2
WMT 157 ¹²	Passage Door	4
WMT 1821	AlphaCAM and the CNC Router	4
WMT 1831	SketchUp for Woodworkers	3
WMT 184 ¹²	Introduction to Digital Fabrication	3
WMT 2021	Advanced Furniture Casegoods	4
WMT 2041	Advanced Tables	4
WMT 2051	Veneering and Marquetry	4
WMT 2111	The Workbench Class	4
WMT 2121	Routers and Router Tables	4
WMT 221 ¹	Advanced Handtools – Handplanes	2
WMT 2221	Advanced Handtools – Joinery	2
WMT 2231	Advanced Handtools – Layout Tools	2
WMT 2241	Advanced Handtools – Dovetails	2
WMT 2311	Outdoor Seating	4
WMT 2321	Chair Design and Construction	4
WMT 2331	Morris Chair	4
WMT 2351	Windsor Chair	3
WMT 2371	Traditional American Furniture	4
WMT 2441	Chest of Drawers	4
WMT 2451	Curved and Tapered Forms for Furniture	4
WMT 2461	Sculptural Rocking Chair	4
WMT 258 ²	Mantels and Wall Systems	4
WMT 281 ²	Intermediate Cabinet Vision	2.5
WMT 282 ²	Intermediate Alphacam and the CNC Rou	ter 4

¹Furniture Making elective ²Cabinetmaking elective

For detailed course descriptions, please refer to the current General Catalog: www.cerritos.edu/catalog



Interested in enrolling at Cerritos College?

Please refer to the step-by-step enrollment process: <u>www.cerritos.edu/futurestudents</u>

Want to apply to get your certificate?

- 1. Make sure you meet the requirements for the certificate.
 - a. Determine which form to fill out and download the form at:

www.cerritos.edu/admissions-and-records/online-forms/

- i. Petition for Certificate: Petition to graduate with a Certificate of Achievement
- ii. Petition for Degree: Petition to graduate with an Associate in Arts
- iii. Petition for Associate in Arts Degree for Transfer (AAT/AST): This degree pattern is articulated for transfer to the CSU system
- 2. Fill out the appropriate form and meet with a counselor.
 - a. Make an appointment by calling (562) 860-2451, ext. 2231or use Online Counseling at: www.cerritos.edu/counseling/online-orientation.htm







11110 Alondra Blvd., Norwalk, CA 90650 www.cerritos.edu/wood



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Cabinetmaking (Certificate of Achievement - 27- 30 Units)

Dear Woodworking student,

This handout has been designed to <u>clarify the path</u> to success. The Certificate of Achievement in this field consists of four semesters of study starting in the fall of any year. You will <u>enter the path</u> by taking "Introduction to Faceframe Cabinetmaking" and "Introduction to Cabinet Vision" or "Alphacam and the CNC Router." These courses will introduce the student to the use of hand tools, portable power tools and machinery used in the construction of traditional faceframe cabinetry. Students will also learn about Cabinet Vision, a popular cabinet design software program, or the functions of Alphacam software and additional methods for operating the computer numeric control (CNC) router in woodworking applications.

In the following semesters, you will stay the path by taking "32mm System of Cabinetmaking" and "Architectural Millwork." You will also take "Intermediate Faceframe Cabinetmaking" or "Intermediate 32mm System of Cabinetmaking" and "Production Cabinetmaking" or "Production - Special Projects." The 32mm course will introduce you to the European, or frameless, system of cabinetmaking and construction. The intermediate courses will enhance your knowledge of both systems, including multi-cabinet design and cabinet installation. In Architectural Millwork you will learn the basics of house framing, door and window installation, and case, base, and crown molding installation. The production courses enable students to work as a team in the design, manufacturing, and installation of wall-mounted cabinets and fixtures for on-campus use. These courses include instruction in cabinet design, production techniques, materials science, cost estimating, time management, and scheduling. In the fourth semester, students will complete the path by taking "Intermediate Alphacam and the CNC Router" or other elective course. The course order may change depending on availability and prerequisite requirements. Upon completing the path, you will have the career and technical skills required to obtain a job in the woodworking industry. You can also obtain an Associate of Arts degree upon completion of your general education requirements.



NEW STUDENTS AND/OR FIRST SEMESTER (FALL)

Course	Course Name	Semester Offered
WMT 151 (4 units)	Introduction to Faceframe Cabinetmaking	Fall and Spring
WMT 181 (3 units)	Introduction to Cabinet Vision	Fall or Spring
OR		
WMT 182 (4 units)	Alphacam and the CNC Router	Fall or Spring
7-8 Units	2 Classes	

CONTINUING STUDENTS SECOND SEMESTER (SPRING)

Course	Course Name	Semester Offered
WMT 153 (4 units)	32mm System of Cabinetmaking	Spring
WMT 155 (4 units)	Architectural Millwork	Fall or Spring
8 Units	2 Classes	

CONTINUING STUDENTS THIRD SEMESTER (FALL)

Course	Course Name	Semester Offered
WMT 250 (4 units)	Intermediate Faceframe Cabinetmaking	Fall or Spring
OR		
WMT 252 (4 units)	Intermediate 32mm System of Cabinetmaking	Fall or Spring
WMT 291 (4 units)	Production Cabinetmaking	Fall or Spring
OR		
WMT 292 (4 units)	Production - Specal Project	Fall or Spring
8 Units	2 Classes	

CONTINUING STUDENTS SECOND SEMESTER (SPRING)

Course	Course Name	Semester Offered
WMT 282 (4 units)	Intermediate Alphacam and the CNC Router [1]	Spring
8 Units	1 Class	



Notes Classes are usually offered during the day and evening

[1] May choose to substitute four (4) units of different Woodworking classes (See Catalog for class choices)

CNC Woodworking (Certificate of Achievement - 20.5 Units)

Dear Woodworking student,

This handout has been designed to <u>clarify the path</u> to success. The Certificate of Achievement in this field consists of three semesters of study starting in the fall of any year. You will <u>enter the path</u> by taking "Introduction to Faceframe Cabinetmaking" and "Introduction to Digital Fabrication." These courses will introduce students to the methods, materials, tools, and machinery used in the construction of traditional faceframe cabinetry. As well as Rhino3D software and its use in fabrication operations using computer controlled machines.

In the second semester, you will <u>stay the path</u> by taking "Introduction to Cabinet Vision" and "Alphacam and the CNC Router." These courses will introduce students to Cabinet Vision, a popular cabinet design software program, as well as Alphacam software and its use in operating the computer numerical control (CNC) router for woodworking applications. In the third semester, students will complete the path by taking "Intermediate Cabinet Vision" and "Intermediate Alphacam and the CNC Router." These courses will provide the student with the intermediate skills and knowledge required to utilize Cabinet Vision software with CNC machinery. Students will review and learn intermediate functions of Alphacam and additional methods for operating the CNC router in woodworking applications. Topics include software operations, 3D surface machining, CNC router setup, advanced tooling, and operation of the CNC router. Emphasis is placed on design planning, safety, and efficiency. The order may be changed depending on course availability and prerequisite requirements. Upon <u>completing the path</u>, you will have the career and technical skills required to obtain a job in the woodworking industry.



NEW STUDENTS AND/OR FIRST SEMESTER (FALL)

Course	Course Name	Semester Offered
WMT 151 (4 units)	Introduction to Faceframe Cabinetmaking	Fall & Spring
WMT 184 (3 units)	Introduction to Digital Fabrication	Fall & Spring
7 Units	2 Classes	

CONTINUING STUDENTS SECOND SEMESTER (SPRING)

Course	Course Name	Semester Offered
WMT 181 (3 units)	Introduction to Cabinet Vision	Fall
WMT 182 (4 units)	Alphacam and the CNC Router	Fall or Spring
7 Units	2 Classes	

CONTINUING STUDENTS THIRD SEMESTER (FALL)

Course	Course Name	Semester Offered
WMT 281 (2.5 units)	Intermediate Cabinet Vision	Fall or Spring
WMT 282 (4 units)	Intermediate Alphacam and the CNC Router	Fall or Spring
6.5 Units	2 Classes	

Notes

Classes are usually offered during evening



Furniture Making (Certificate of Achievement - 25 Units)

Dear Woodworking student,

This handout has been designed to <u>clarify the path</u> to success. The Certificate of Achievement in this field consists of four semesters of study starting in the fall of any year. You will <u>enter the path</u> by taking "Introduction to Woodworking" and "Wood Finishing." These woodworking courses acquaints the student with the essential principles of woodworking. Topics include wood technology, use of hand tools, portable power tools, basic machinery, wood finishing techniques, wood coloring, and related topics.

In the following semesters, you will <u>stay the path</u> by taking "Introduction to Tables," "Introduction to Solid Wood Casegoods," "Woodworking with Hand Tools," and "Furniture Design." These courses will increase the student's skill in the use of hand tools, portable power tools and machinery as it relates to solid wood tables and free-standing casegoods. In the Hand Tool class, topics include edge tool sharpening and hand-cut joinery. In the fourth semester, students will complete the path by taking "Curved and Tapered Forms for Furniture" or other elective course. This course introduces the student to a variety of advanced techniques for creating curved and tapered forms appropriate for furniture construction. The order may be changed depending on course availability and prerequisite requirements. Upon <u>completing the path</u>, you will have the career and technical skills required to obtain a job in the woodworking industry. You can also obtain an Associate of Arts degree upon completion of your general education requirements.



NEW STUDENTS AND/OR FIRST SEMESTER (FALL)

Course	Course Name	Semester Offered
WMT 101 (3 units)	Introduction to Woodworking	Fall & Spring
WMT 107 (3 units)	Wood Finishing	Fall and Spring
6 Units	2 Classes	

CONTINUING STUDENTS SECOND SEMESTER (SPRING)

Course	Course Name	Semester Offered
WMT 103 (4 units)	Introduction to Tables	Fall and Spring
WMT 201 (4 units)	Woodworking with Hand Tools	Fall
8 Units	2 Classes	

CONTINUING STUDENTS THIRD SEMESTER (FALL)

Course	Course Name	Semester Offered
WMT 102 (4 units)	Introduction to Solid Wood Casegoods	Fall and Spring
WMT 130 (3 units)	Furniture Design	Fall
7 Units	2 Classes	

CONTINUING STUDENTS FOURTH SEMESTER (SPRING)

Course	Course Name	Semester Offered
WMT 245 (4 units)	Curved and Tapered Forms for Furniture [1]	Fall or Spring
8 Units	1 Class	

Notes

Classes are usually offered during the day and evening

[1] May choose to substitute four (4) units of different Woodworking classes (See Catalog for class choices)



Woodworking Certificate

(Certificate of Achievement - 28 Units)

Dear Woodworking student,

This handout has been designed to <u>clarify the path</u> to success. The Certificate of Achievement in this field consists of four semesters of study starting in the fall of any year. You will <u>enter the path</u> by taking the "Introduction to Woodworking" and "Wood Finishing" courses. These courses acquaint the student with the essential principles of woodworking. Topics include wood technology, use of hand tools, portable power tools, basic machinery, wood finishing techniques, wood coloring, and related topics.

In the following semesters, you will <u>stay the path</u> by taking: "Introduction to Tables," "Introduction to Solid Wood Casegoods," "Introduction to Faceframe Cabinetmaking," and "32mm System of Cabinetmaking." These courses will increase the student's skill in the use of hand tools, portable power tools and machinery as it relates to solid wood tables and free-standing casegoods, and faceframe/frameless cabinetry. In the fourth semester, students will complete the path by taking "Introduction to Woodturning" and "Architectural Millwork." These courses will give students the opportunity to create turned projects using the woodworking lathe. You will learn about house framing basics, window and door installation, as well as fabrication/ installation of case, base, and crown molding. The order may change depending on course availability and prerequisite requirements. Upon <u>completing the path</u>, you will have the career and technical skills required to obtain a job in the woodworking industry. You can also obtain an Associate of Arts degree upon completion of your general education requirements.



NEW STUDENTS AND/OR FIRST SEMESTER (FALL)

Course	Course Name	Semester Offered
WMT 101 (3 units)	Introduction to Woodworking	Fall, Spring & Summer
WMT 107 (3 units)	Wood Finishing	Fall and Spring
6 Units	2 Classes	

NEW STUDENTS AND/OR SECOND SEMESTER (FALL)

Course	Course Name	Semester Offered
WMT 151 (4 units)	Introduction to Faceframe Cabinetmaking	Fall and Spring
WMT 103 (4 units)	Introduction to Tables	Fall and Spring
8 Units	2 Classes	

CONTINUING STUDENTS THIRD SEMESTER (SPRING)

Course	Course Name	Semester Offered
WMT 102 (4 units)	Introduction to Solid Wood Casegoods	Fall and Spring
WMT 153 (4 units)	32mm System of Cabinetmaking	Spring
8 Units	2 Classes	

CONTINUING STUDENTS FOURTH SEMESTER (FALL)

Course	Course Name	Semester Offered
WMT 118 (2 units)	Introduction to Woodturning	Fall and Spring
WMT 155 (4 units)	Architectural Millwork	Fall and Spring
6 Units	2 Classes	

Notes

Classes are usually offered during the day and evening

