

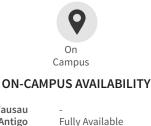
# Hardwood Manufacturers

## CERTIFICATE

## **PROGRAM AT A GLANCE**

14.45 Credit Certificate

## FORMATS OFFERED



Wausau Antigo Medford Phillips Spencer Wittenberg

> APPROXIMATE COST \$2,947 (Tuition: \$2,605, Books: \$342)

(Estimated Housing: \$2,500)

## NOT FINANCIAL AID ELIGIBLE

Northcentral Technical College does not discriminate on the basis of race, color, national origin, sex, disability or age in employment, admissions or its programs or activities. The following person has been designated to handle inquiries regarding the College's nondiscrimination policies: Equal Opportunity Officer, Northcentral Technical College, 1000 W. Campus Drive, Wausau, WI 54401. Phone: 715.803.1057 This unique certificate prepares learners for fast growing, in-demand positions within the hardwood manufacturing industry. This short 12 week certificate will help launch you into a life long rewarding career. All classes are taught in person and utilize Northcentral Technical College's 27,000 square foot state-of-the-art Wood Technology Center of Excellence.

### FALL 2020 SCHEDULE

The 2020 Hardwood Manufacturers Certificate program is scheduled for August 31 - November 20, 2020. Classes are typically held Monday - Thursday between 8:00 a.m. - 4:30 p.m.

## **TRANSFER OPPORTUNITIES**

Credits earned at NTC may transfer to four-year colleges and universities. Visit **www.ntc.edu/transfer** for a complete listing of transfer opportunities for this certificate.

## **GET STARTED**



Submit your online application today at bit.ly/NTCHardwoodCertificate

For more information on this certificate, contact Continuing Education at 715.803.1965 or email ce@ntc.edu

## Formats Available for this Program



This program has courses that can be completed at one of our six campus locations, as well as our industry driven Centers of Excellence. Review on-campus availability on the reverse side of this flyer. You can also take a virtual tour of our campus locations by visiting www.ntc.edu/locations.

## **Course Descriptions**

### 47-465-401AJ INTRODUCTION TO THE HARDWOOD INDUSTRY & SAFETY 0.45 credit

As an introductory course for the Hardwood Manufacturers Certificate, learners will prepare for careers in the field by exploring work place expectations, manufacturing efficiencies, and safety and health practices. Upon completion of this course students will earn an OSHA recognized Forklift Operators Certificate.

#### WOOD SCIENCE AND TECHNOLOGY 10-465-100 4 credits

As an introduction course, students will learn wood anatomy and the physical nature of wood and how these characteristics are used in species selection for industrial raw materials. Species identification will be covered in the lab portion of this course.

#### 10-465-113 WOOD DRYING SCIENCE 4 credits

Covers the process of drying wood. Drying lumber is studied in depth, focusing on the relationship between wood, temperature, relative humidity and air velocity. Learners will focus on moisture content measuring techniques, types of kilns and controls, how to generate kiln schedules and procedures for sampling, while operating a conventional steam kiln, dehumidification kiln, and vacuum kiln.

#### WOOD MANUFACTURING PROCESSES **10**-465-115 3 credits

In this course, the student will be introduced to the primary breakdown of logs into lumber, and logs into veneers and strands for wood composites. An overview of plant layout, machine centers and product flow will be examined for each product line along with species mix.

### 10-465-116 HARDWOOD GRADING AND MERCHANDISING

3 credits

This course is an introduction to the measurement, merchandising and inspection of hardwood lumber and logs. Topics covered include hardwood manufacturing standards, tally criteria, defect identification and the various methods of determining the grade of hardwood lumber and logs. Students will be introduced to the latest development in automated lumber scanning equipment. Emphasis will be on the understanding of standard grade classifications used within the industry and hands-on practice using inspection rules and scaling sticks.

The curriculum and course information listed is accurate at the time of printing and is subject to change. For the most up-to-date curriculum and course information visit www.ntc.edu, contact Admissions at 715.675.3331 or email admissions@ntc.edu.

## 2020-21 CURRICULUM

47-465-401AJ	INTRODUCTION TO THE HARDWOOD INDUSTRY & SAFETY	0.45
10-465-100	WOOD SCIENCE AND TECHNOLOGY	4
10-465-113	WOOD DRYING SCIENCE	4
10-465-115	WOOD MANUFACTURING PROCESSES	3
10-465-116	HARDWOOD GRADING AND MERCHANDISING	3
	Total	14.45
	Total Credits Required for Graduation	14.45