

# Precision Production

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## Overview

The Fast Forward Precision Production (CIP 48) pathway has three Associate Degree opportunities through Northshore Technical Community College and South Louisiana Community College.

This pathway generally prepares individuals to apply technical knowledge and skills to create products using techniques of precision craftsmanship or technical illustration.

## Guidance Overview

This guidance is meant to help school systems and parents navigate the opportunities to complete an Associate Degree in high school. School systems should verify information with the post-secondary institution to ensure students are enrolled in the appropriate college classes to earn the associates degree.

This guidance includes:

- [Post-Secondary Degree Paths](#) details all courses required for the Applied Associate Degree. The Applied Associate Degree has limited general education courses and is primarily designed to prepare students for immediate employment or career entry.
- [Secondary Courses not included in the Post-Secondary Program of Study](#) detail all courses the student must take prior to or in tandem with the college courses to meet secondary graduation requirements. Typically, these are courses students are scheduled to take in grades 9 and 10.
- [Capstone Credentials](#) details all Industry Based Certifications a student can receive to complete the Applied Associate Degree. Students working towards a Jump Start Diploma must complete at least one capstone credential to graduate.
- [High School Transcription](#) details the LDOE course code a counselor should use to transcribe the college courses that do not have a dedicated LDOE course code.

## Post-Secondary Degree Paths Approved by BESE for Fast Forward

- **Northshore Technical Community College:**  
[Associate of Applied Science: Technical Studies Concentration in Machine Tool Technology](#)  
[Associate of Applied Science: Technical Studies Concentration in Welding](#)
- **South Louisiana Community College:**  
[Associate of Applied Science: Technical Studies in Welding](#)



# Post-Secondary Degree Paths

## Northshore Technical Community College: Associate of Applied Science: Technical Studies Concentration in Machine Tool Technology

Post-Secondary Course Name	Post-Secondary Course Code	Dedicated Secondary Course Name	Dedicated Secondary Course Code
English Composition I	ENGL 1015	English III: DE - CENL 1013 English Composition I	120601
College Algebra	MATH 1015	Algebra III: DE - CMAT 1213 College Algebra	160500
Western Civilization I	HIST 1010	Western Civilization: DE - CHIS 1013 Western Civilization I	220446
Blueprint Reading	MTTC 2110		
Intro. To Machine Tools	MTTC 2120		
Bench Work	MTTC 2210		
Drill Press	MTTC 2230		
Basic Lathe I	MTTC 2310		
Basic Mill I	MTTC 2410		
Forming and Shaping	MTTC 2220		
Basic Lathe II	MTTC 2320		
Basic Mill II	MTTC 2420		
Environmental Biology	BIOL 1110		
Advanced Lathe	MTTC 2331		
Advanced Mill	MTTC 2431		
Precision Grinding	MTTC 2510		

# Post-Secondary Degree Paths

## Northshore Technical Community College: Associate of Applied Science: Technical Studies Concentration in Welding

Post-Secondary Course Name	Post-Secondary Course Code	Dedicated Secondary Course Name	Dedicated Secondary Course Code
English Composition I	ENGL 101	English III: DE - CENL 1013 English Composition I	120601
College Algebra Fundamentals	MATH 1005	Algebra III: DE - CMAT 1213 College Algebra	160500
Critical Reading and Writing	ENGL 102	English IV: DE - CENL 1023 English Composition II	120607
Intro to American Gov	POLI 2010	Government: DE - CPOL 2013 Introduction to American Government	220514
Western Civilization I	HIST 1010	World History: DE - CHIS 1013 World Civilization I	220446
Environmental Biology	BIOL 1110	Environmental Science: DE - CEVS 1103 Environmental Science	150914
Occupational Orient & Safety	WELD 1110		
Blueprint/Metallurgy & Weld Symbols	WELD 1120		
Welding Inspection & Testing	WELD 1130		
Oxyfuel Systems	WELD 1210		
SMAW - Basic Beads	WELD 1410		
SMAW - Fillet Weld	WELD 1411		
SMAW V Groove BU/Gouge	WELD 1412		
SMAW - V - Groove Open	WELD 1420		
Cutting Processes - CAC/PAC	WELD 1310		
FCAW - Basic Multi-Joint	WELD 2110		
GTAW -Basic Multi-Joint	WELD 2210		
SMAW - Pipe 5G or FCAW Pipe 2G or GTAW -Pipe 2G or GMAW -Pipe 5G	WELD 1511 or WELD 2113, or, WELD 2221, or WELD 2321		
SMAW - Pipe 6G or FCAW Pipe 6G or GTAW -Pipe 6G or GMAW -Pipe 6G	WELD 1512 or WELD 2114, or, WELD 2222, or WELD 2322		
GMAW - Basic Fillet Weld	WELD 2310		
SMAW -Pipe 2G or FCAW Pipe 5G or GTAW - Pipe 5G or GMAW - Pipe 2G	WELD 1510 or WELD 2112 or WELD 2220 or WELD 2320		

# Post-Secondary Degree Paths

## South Louisiana Community College: Associate of Applied Science: Technical Studies in Welding

Post-Secondary Course Name	Post-Secondary Course Code	Dedicated Secondary Course Name	Dedicated Secondary Course Code
Rhetoric & Composition	ENG 1010	English III: DE - CENL 1013 English Composition I	120601
College Algebra	MATH 1105	Algebra III: DE - CMAT 1213 College Algebra	160500
American National Government	POLI 1100	Government: DE - CPOL 2013 Intro to American Government	220514
Environmental Science	ENSC 1000	Environmental Science: DE - CEVS 1103 Environmental Science	150914
Intro to Fiction or British Literature	ENG 2055 or ENG 2020	English IV: DE - CENL 2303 Introduction to Fiction or CENL 2103 British Literature I	120614 or 120608
Mathematics for Workforce Occupations	WFMA 1003		
Cutting Processes	WELD 1103		
Occupational Orientation and Safety	WELD 1003		
Shielded Metal Arc Welding I	WELD 1205		
Electrical Fundamentals and Inspection	WELD 1403		
Pneumatic/Hydraulic Power Systems	OGPT 1500		
Shielded Metal Arc Welding II	WELD 1304		
Metallurgy and Symbols	WELD 1123		
Gas Metal Arc Welding & Flux Cored Arc Welding I	WELD 2115		
Gas Tungsten Arc Welding	WELD 2103		
Advanced Shielded Metal Arc Welding V-Groove	WELD 2225		
Gas Metal Arc Welding & Flux Cored Arc Welding II	WELD 2205		
Manufacturing Procedures	WELD 2213		
Basic Industrial Scaffolding (SLCC Corporate College)	TBD by Course Selected		

## Secondary Courses - Grades 9-10

Completing the post-secondary sequence of courses will provide the student with most graduation requirements. The below set of courses would need to be completed on the high school campus.

TOPS University	
Core Academic Requirements	LDOE Course Code
English I	120331
English II	120332
English III	120333
Algebra I	160321
Algebra II	160322
Geometry	160323
Financial Literacy	160345
Biology	150301
Civics	220501/220504
U.S. History	220403
Physical Education I	190105
½ Physical Education II	190106
½ Health Education	190500
Art	TBD by course selected
Foreign Language I	TBD by course selected
Foreign Language II	TBD by course selected

Jump Start	
Core Academic Requirements	LDOE Course Code
English I	120331
English II	120332
Algebra I	160321
Financial Literacy	160345
Geometry	160323
Biology	150301
Civics	220501/220504
Physical Education I	190105
½ Physical Education II	190106
½ Health Education	190500

## Capstone Credentials

In order to graduate, Jump Start students must earn at least one credential from the options below.

Emerging	Basic	Advanced	Fast Forward
Career and Technical Certificate (LCTCS)	Certificate of Technical Studies (LCTCS)	Certificate of Technical Studies (LCTCS)	Associate of Applied Science
NCCER Welder; Electrical; Carpenter Helper	NCCER Welding Level 1	NCCER Welding Level 2	
OSHA 30	AutoDesk Certified User AutoCAD	AutoDesk Inventor Certified User	
ADDA Certified Architectural Apprentice Drafter	Geographic Information System-Entry Level Technician Certification		
	FAA Part 107: Small Unmanned Aircraft Operations		
	Louisiana Micro-Enterprise		
	North America's Building Trades Unions MultiCraft Core Curriculum (MC3)		

## High School Transcript

The below courses should be used for college courses without a dedicated secondary course code.

Secondary Course Name	Secondary Course Code	Maximum Carnegie Units
Fast Forward Welding 1	890700	4
Fast Forward Welding 2	890701	4
Fast Forward Welding 3	890702	4
Fast Forward Welding 4	890703	4
Fast Forward Welding 5	890704	4
Fast Forward Welding 6	890705	4
Fast Forward Welding 7	890706	4
Fast Forward Welding 8	890707	4
Fast Forward Machining 1	891100	4
Fast Forward Machining 2	891101	4
Fast Forward Machining 3	891102	4
Fast Forward Machining 4	891103	4
Fast Forward Machining 5	891104	4
Fast Forward Machining 6	891105	4
Fast Forward Machining 7	891106	4
Fast Forward Machining 8	891107	4