

**2012-2013
Career and Technical Education
Manufacturing Courses**

For up-to-date Bright Futures and State University System course eligibility information, go to:
www.floridastudentfinancialaid.org/SSFAD/bf/acadrequire.htm

For up-to-date NCAA Clearinghouse course eligibility information, go to:
https://web1.ncaa.org/eligibilitycenter/student/index_student.html

The first seven digits of any course number listed below are determined by the Florida Department of Education. The 8th digit of any course number listed below is issued only by BCPS to meet the scheduling needs of our district.

Program Title: Applied Welding Technologies
Program Number: 8754500
Credits: 8.00
Grade Level: 9-12

Course Title: Welding Technologies 1

Course Number: 87545100

Credit: 1.00

Grade Level: 9-12

Major Concepts/Content

This is the first of eight courses that must be taken to complete the program. Students will develop basic welding skills.

PRE REQUISITE: None

CO REQUISITE: None

SPECIAL NOTE: Available only at Atlantic Technical Center and McFatter Technical Center. BF/Gold Seal only

General Course Information:

	YES	NO	Other
Graduation Requirement		X	
Bright Futures (BF)			
Florida Academic Scholar (FAS)		X	
Florida Medallion Scholar (FMS)		X	
Florida Gold Seal Vocational (FGSV)	X		4 YR 24 CREDIT OPTION ONLY **
State University System (SUS)	X		ELECTIVE
National Collegiate Athletic Association (NCAA)		X	
BCPS "Core" Course		X	
Course Level 1=below grade level, 2= at grade level, 3= above grade level			
Industry Credential Eligible		X	
Weighted Quality Points			
State Honors (1 quality point)		X	
BCPS Local Honors ONLY (1 quality point)		X	
Pre IB (1 quality point)		X	
Pre AICE (1 quality point)		X	
AP (Advanced Placement) (2 quality points) *		X	
IB (International Baccalaureate) (2 quality points)		X	
AICE (Advanced International Certificate of Education) (2 quality points)		X	
Technical Dual Enrollment (2 quality points)		X	

* Must take AP exam; otherwise only 1 quality point.

** For the 3-year, 18 credit option, requirements may differ. See your guidance counselor for more information.

Course Title: Welding Technologies 2

Course Number: 87545200

Credit: 1.00

Grade Level: 9-12

Major Concepts/Content

This is the second of eight courses that must be taken to complete the program. Students will develop skills in general welding processes.

Completion of courses 1 & 2 results in Occupational Completion Point A.

PRE REQUISITE: None

CO REQUISITE: Welding Technologies 1

SPECIAL NOTE: Available only at Atlantic Technical Center and McFatter Technical Center. BF/Gold Seal only I

General Course Information:

	YES	NO	Other
Graduation Requirement		X	
Bright Futures (BF)			
Florida Academic Scholar (FAS)		X	
Florida Medallion Scholar (FMS)		X	
Florida Gold Seal Vocational (FGSV)	X		4 YR 24 CREDIT OPTION ONLY **
State University System (SUS)	X		ELECTIVE
National Collegiate Athletic Association (NCAA)		X	
BCPS "Core" Course		X	
Course Level 1=below grade level, 2= at grade level, 3= above grade level			
Industry Credential Eligible		X	
Weighted Quality Points			
State Honors (1 quality point)		X	
BCPS Local Honors ONLY (1 quality point)		X	
Pre IB (1 quality point)		X	
Pre AICE (1 quality point)		X	
AP (Advanced Placement) (2 quality points) *		X	
IB (International Baccalaureate) (2 quality points)		X	
AICE (Advanced International Certificate of Education) (2 quality points)		X	
Technical Dual Enrollment (2 quality points)	X		

* Must take AP exam; otherwise only 1 quality point.

** For the 3-year, 18 credit option, requirements may differ. See your guidance counselor for more information.

Course Title: Welding Technologies 3

Course Number: 87545300

Credit: 1.00

Grade Level: 9-12

Major Concepts/Content

This is the third of eight courses that must be taken to complete the program. The purpose of this course is to develop shielded metal arc welding skills.

PRE REQUISITE: None

CO REQUISITE: Welding Technologies 4

Available only at Atlantic Technical Center and McFatter Technical Center

BF/Gold Seal only

General Course Information:

	YES	NO	Other
Graduation Requirement		X	
Bright Futures (BF)			
Florida Academic Scholar (FAS)		X	
Florida Medallion Scholar (FMS)		X	
Florida Gold Seal Vocational (FGSV)	X		4 YR 24 CREDIT OPTION ONLY **
State University System (SUS)		X	
National Collegiate Athletic Association (NCAA)		X	
BCPS "Core" Course		X	
Course Level 1=below grade level, 2= at grade level, 3= above grade level			
Industry Credential Eligible		X	
Weighted Quality Points			
State Honors (1 quality point)		X	
BCPS Local Honors ONLY (1 quality point)		X	
Pre IB (1 quality point)		X	
Pre AICE (1 quality point)		X	
AP (Advanced Placement) (2 quality points) *		X	
IB (International Baccalaureate) (2 quality points)		X	
AICE (Advanced International Certificate of Education) (2 quality points)		X	
Technical Dual Enrollment (2 quality points)	X		

* Must take AP exam; otherwise only 1 quality point.

** For the 3-year, 18 credit option, requirements may differ. See your guidance counselor for more information.

Course Title: Welding Technologies 4
Course Number: 87545400
Credit: 1.00
Grade Level: 10-12

Major Concepts/Content

This is the fourth of eight courses that must be taken to complete the program. The purpose of this course is to apply shielded metal arc welding skills.

Completion of courses 3 & 4 results in Occupational Completion Point B.

PRE REQUISITE: None

CO REQUISITE: Welding Technologies 3

SPECIAL NOTE: Available only at Atlantic Technical Center and McFatter Technical Center. BF/Gold Seal only

General Course Information:

	YES	NO	Other
Graduation Requirement		X	
Bright Futures (BF)			
Florida Academic Scholar (FAS)		X	
Florida Medallion Scholar (FMS)		X	
Florida Gold Seal Vocational (FGSV)	X		4 YR 24 CREDIT OPTION ONLY **
State University System (SUS)		X	
National Collegiate Athletic Association (NCAA)		X	
BCPS "Core" Course		X	
Course Level 1=below grade level, 2= at grade level, 3= above grade level			
Industry Credential Eligible		X	
Weighted Quality Points			
State Honors (1 quality point)		X	
BCPS Local Honors ONLY (1 quality point)		X	
Pre IB (1 quality point)		X	
Pre AICE (1 quality point)		X	
AP (Advanced Placement) (2 quality points) *		X	
IB (International Baccalaureate) (2 quality points)		X	
AICE (Advanced International Certificate of Education) (2 quality points)		X	
Technical Dual Enrollment (2 quality points)	X		

* Must take AP exam; otherwise only 1 quality point.

** For the 3-year, 18 credit option, requirements may differ. See your guidance counselor for more information.

Course Title: Welding Technologies 5
Course Number: 87545500
Credit: 1.00
Grade Level: 11-12

Major Concepts/Content

This is the fifth of eight courses that must be taken to complete the program. The purpose of this course is to apply gas metal arc welding skills.

Completion of this course results in Occupational Completion Point C.

PRE REQUISITE: None

CO REQUISITE: None

SPECIAL NOTE: Available only at Atlantic Technical Center and McFatter Technical Center. BF/Gold Seal only, Technical Dual Enrollment

General Course Information:

	YES	NO	Other
Graduation Requirement		X	
Bright Futures (BF)			
Florida Academic Scholar (FAS)		X	
Florida Medallion Scholar (FMS)		X	
Florida Gold Seal Vocational (FGSV)	X		4 YR 24 CREDIT OPTION ONLY **
State University System (SUS)		X	
National Collegiate Athletic Association (NCAA)		X	
BCPS "Core" Course		X	
Course Level 1=below grade level, 2= at grade level, 3= above grade level			
Industry Credential Eligible		X	
Weighted Quality Points			
State Honors (1 quality point)		X	
BCPS Local Honors ONLY (1 quality point)		X	
Pre IB (1 quality point)		X	
Pre AICE (1 quality point)		X	
AP (Advanced Placement) (2 quality points) *		X	
IB (International Baccalaureate) (2 quality points)		X	
AICE (Advanced International Certificate of Education) (2 quality points)		X	
Technical Dual Enrollment (2 quality points)	X		

* Must take AP exam; otherwise only 1 quality point.

** For the 3-year, 18 credit option, requirements may differ. See your guidance counselor for more information.

Course Title: Welding Technologies 6

Course Number: 87545600

Credit: 1.00

Grade Level: 11-12

Major Concepts/Content

This is the sixth of eight courses that must be taken to complete the program. The purpose of this course is to apply flux cored arc-welding skills.

Completion of this course results in Occupational Completion Point D.

PRE REQUISITE: None

CO REQUISITE: None

SPECIAL NOTE: Available only at Atlantic Technical Center and McFatter Technical Center. BF/Gold Seal only, Technical Dual Enrollment

General Course Information:

	YES	NO	Other
Graduation Requirement		X	
Bright Futures (BF)			
Florida Academic Scholar (FAS)		X	
Florida Medallion Scholar (FMS)		X	
Florida Gold Seal Vocational (FGSV)	X		4 YR 24 CREDIT OPTION ONLY **
State University System (SUS)		X	
National Collegiate Athletic Association (NCAA)		X	
BCPS "Core" Course		X	
Course Level 1=below grade level, 2= at grade level, 3= above grade level			
Industry Credential Eligible		X	
Weighted Quality Points			
State Honors (1 quality point)		X	
BCPS Local Honors ONLY (1 quality point)		X	
Pre IB (1 quality point)		X	
Pre AICE (1 quality point)		X	
AP (Advanced Placement) (2 quality points) *		X	
IB (International Baccalaureate) (2 quality points)		X	
AICE (Advanced International Certificate of Education) (2 quality points)		X	
Technical Dual Enrollment (2 quality points)	X		

* Must take AP exam; otherwise only 1 quality point.

** For the 3-year, 18 credit option, requirements may differ. See your guidance counselor for more information.

Course Title: Welding Technologies 7
Course Number: 87545700
Credit: 1.00
Grade Level: 11-12

Major Concepts/Content

This is the seventh of eight courses that must be taken to complete the program. The purpose of this course is to apply gas tungsten arc welding skills. Completion of this course results in Occupational Completion Point E.

PRE REQUISITE: None

CO REQUISITE: None

SPECIAL NOTE: Available only at Atlantic Technical Center and McFatter Technical Center. BF/Gold Seal only, Technical Dual Enrollment

General Course Information:

	YES	NO	Other
Graduation Requirement		X	
Bright Futures (BF)			
Florida Academic Scholar (FAS)		X	
Florida Medallion Scholar (FMS)		X	
Florida Gold Seal Vocational (FGSV)	X		4 YR 24 CREDIT OPTION ONLY **
State University System (SUS)		X	
National Collegiate Athletic Association (NCAA)		X	
BCPS "Core" Course		X	
Course Level 1=below grade level, 2= at grade level, 3= above grade level			
Industry Credential Eligible		X	
Weighted Quality Points			
State Honors (1 quality point)		X	
BCPS Local Honors ONLY (1 quality point)		X	
Pre IB (1 quality point)		X	
Pre AICE (1 quality point)		X	
AP (Advanced Placement) (2 quality points) *		X	
IB (International Baccalaureate) (2 quality points)		X	
AICE (Advanced International Certificate of Education) (2 quality points)		X	
Technical Dual Enrollment (2 quality points)	X		

* Must take AP exam; otherwise only 1 quality point.

** For the 3-year, 18 credit option, requirements may differ. See your guidance counselor for more information.

Course Title: Welding Technologies 8

Course Number: 87545800

Credit: 1.00

Grade Level: 11-12

Major Concepts/Content

This is the eighth of eight courses that must be taken to complete the program. The purpose of this course is to develop pipe-welding skills.

Completion of this course results in Occupational Completion Point F.

PRE REQUISITE: None

CO REQUISITE: None

SPECIAL NOTE: Available only at Atlantic Technical Center and McFatter Technical Center. BF/Gold Seal only, Technical Dual Enrollment

General Course Information:

	YES	NO	Other
Graduation Requirement		X	
Bright Futures (BF)			
Florida Academic Scholar (FAS)		X	
Florida Medallion Scholar (FMS)		X	
Florida Gold Seal Vocational (FGSV)	X		4 YR 24 CREDIT OPTION ONLY **
State University System (SUS)		X	
National Collegiate Athletic Association (NCAA)		X	
BCPS "Core" Course		X	
Course Level 1=below grade level, 2= at grade level, 3= above grade level			
Industry Credential Eligible	X		
Weighted Quality Points			
State Honors (1 quality point)		X	
BCPS Local Honors ONLY (1 quality point)		X	
Pre IB (1 quality point)		X	
Pre AICE (1 quality point)		X	
AP (Advanced Placement) (2 quality points) *		X	
IB (International Baccalaureate) (2 quality points)		X	
AICE (Advanced International Certificate of Education) (2 quality points)		X	
Technical Dual Enrollment (2 quality points)	X		

* Must take AP exam; otherwise only 1 quality point.

** For the 3-year, 18 credit option, requirements may differ. See your guidance counselor for more information.

Program Title: Automation and Production Technology
Program Number: 9200100
Credits: 4.00
Grade Level: 9-12

Course Title: Automation and Production Technology 1
Course Number: 9200110
Credit: 1.00
Grade Level: 9-12

Major Concepts/Content

This is the first of four courses that must be taken to complete the program. Instruction in the fundamentals of automation, manufacturing, and engineering technologies is provided. Upon completion, the student should be prepared to take the MSSC Safety assessment.

Completion of course 1 results in Occupational completion Point A.

PRE REQUISITE: None

CO REQUISITE: None

SPECIAL NOTE: Available only at Atlantic Technical Center. BF/Gold Seal only

General Course Information:

	YES	NO	Other
Graduation Requirement		X	
Bright Futures (BF)			
Florida Academic Scholar (FAS)		X	
Florida Medallion Scholar (FMS)		X	
Florida Gold Seal Vocational (FGSV)	X		4 YR 24 CREDIT OPTION ONLY **
State University System (SUS)		X	
National Collegiate Athletic Association (NCAA)		X	
BCPS "Core" Course		X	
Course Level 1=below grade level, 2= at grade level, 3= above grade level			
Industry Credential Eligible		X	
Weighted Quality Points			
State Honors (1 quality point)		X	
BCPS Local Honors ONLY (1 quality point)		X	
Pre IB (1 quality point)		X	
Pre AICE (1 quality point)		X	
AP (Advanced Placement) (2 quality points) *		X	
IB (International Baccalaureate) (2 quality points)		X	
AICE (Advanced International Certificate of Education) (2 quality points)		X	
Technical Dual Enrollment (2 quality points)		X	

* Must take AP exam; otherwise only 1 quality point.

** For the 3-year, 18 credit option, requirements may differ. See your guidance counselor for more information.

Course Title: Automation and Production Technology 2

Course Number: 9200120

Credit: 1.00

Grade Level: 9-12

Major Concepts/Content

This is the second of four courses that must be taken to complete the program. Instruction in the fundamentals of automation, manufacturing, and engineering technologies is provided. Upon completion, the student should be prepared to take the MSSC Quality Practices and Measurement assessment. Completion of course 2 results in Occupational Completion Point B.

PRE REQUISITE: None

CO REQUISITE: Automation and Production Technology 1, 3 and 4

SPECIAL NOTE: Available only at Atlantic Technical Center.

BF/Gold Seal only, Technical dual Enrollment

General Course Information:

	YES	NO	Other
Graduation Requirement		X	
Bright Futures (BF)			
Florida Academic Scholar (FAS)		X	
Florida Medallion Scholar (FMS)		X	
Florida Gold Seal Vocational (FGSV)	X		4 YR 24 CREDIT OPTION ONLY **
State University System (SUS)		X	
National Collegiate Athletic Association (NCAA)		X	
BCPS "Core" Course		X	
Course Level 1=below grade level, 2= at grade level, 3= above grade level			
Industry Credential Eligible		X	
Weighted Quality Points			
State Honors (1 quality point)		X	
BCPS Local Honors ONLY (1 quality point)		X	
Pre IB (1 quality point)		X	
Pre AICE (1 quality point)		X	
AP (Advanced Placement) (2 quality points) *		X	
IB (International Baccalaureate) (2 quality points)		X	
AICE (Advanced International Certificate of Education) (2 quality points)		X	
Technical Dual Enrollment (2 quality points)	X		

* Must take AP exam; otherwise only 1 quality point.

** For the 3-year, 18 credit option, requirements may differ. See your guidance counselor for more information.

Course Title: Automation and Production Technology 3

Course Number: 9200130

Credit: 1.00

Grade Level: 9-12

Major Concepts/Content

This is the third of four courses that must be taken to complete the program. Instruction in the fundamentals of automation, manufacturing, and engineering technologies is provided. Upon completion, the student should be prepared to take the MSSC Maintenance Awareness assessment.

Completion of course 3 results in Occupational Completion Point C.

PRE REQUISITE: None

CO REQUISITE: Automation and Production Technology 1, 2 and 4

SPECIAL NOTE: Available only at Atlantic Technical Center

BF/Gold Seal only, Technical Dual Enrollment

General Course Information:

	YES	NO	Other
Graduation Requirement		X	
Bright Futures (BF)			
Florida Academic Scholar (FAS)		X	
Florida Medallion Scholar (FMS)		X	
Florida Gold Seal Vocational (FGSV)	X		4 YR 24 CREDIT OPTION ONLY **
State University System (SUS)		X	
National Collegiate Athletic Association (NCAA)		X	
BCPS "Core" Course		X	
Course Level 1=below grade level, 2= at grade level, 3= above grade level			
Industry Credential Eligible		X	
Weighted Quality Points			
State Honors (1 quality point)		X	
BCPS Local Honors ONLY (1 quality point)		X	
Pre IB (1 quality point)		X	
Pre AICE (1 quality point)		X	
AP (Advanced Placement) (2 quality points) *		X	
IB (International Baccalaureate) (2 quality points)		X	
AICE (Advanced International Certificate of Education) (2 quality points)		X	
Technical Dual Enrollment (2 quality points)	X		

* Must take AP exam; otherwise only 1 quality point.

** For the 3-year, 18 credit option, requirements may differ. See your guidance counselor for more information.

Course Title: Automation and Production Technology 4
Course Number: 9200140
Credit: 1.00
Grade Level: 10-12

Major Concepts/Content

This is the fourth of four courses that must be taken to complete the program. Instruction in the fundamentals of automation, manufacturing, and engineering technologies is provided. Upon completion, the student should be prepared to take the MSSC Manufacturing Processes and Production assessment. Completion of course 4 results in Occupational Completion Point D.

PRE REQUISITE: None

CO REQUISITE: Automation and Production Technology 1, 2 and 3

SPECIAL NOTE: Available only at Atlantic Technical Center. BF/Gold Seal only

General Course Information:

	YES	NO	Other
Graduation Requirement		X	
Bright Futures (BF)			
Florida Academic Scholar (FAS)		X	
Florida Medallion Scholar (FMS)		X	
Florida Gold Seal Vocational (FGSV)	X		4 YR 24 CREDIT OPTION ONLY **
State University System (SUS)		X	
National Collegiate Athletic Association (NCAA)		X	
BCPS "Core" Course		X	
Course Level 1=below grade level, 2= at grade level, 3= above grade level			
Industry Credential Eligible	X		
Weighted Quality Points			
State Honors (1 quality point)		X	
BCPS Local Honors ONLY (1 quality point)		X	
Pre IB (1 quality point)		X	
Pre AICE (1 quality point)		X	
AP (Advanced Placement) (2 quality points) *		X	
IB (International Baccalaureate) (2 quality points)		X	
AICE (Advanced International Certificate of Education) (2 quality points)		X	
Technical Dual Enrollment (2 quality points)	X		

* Must take AP exam; otherwise only 1 quality point.

** For the 3-year, 18 credit option, requirements may differ. See your guidance counselor for more information.

Course Title: Industrial Cooperative Education (OJT)

Course Number: 87004000

Credit: 1.00

Grade Level: 10-12

Major Concepts/Content

This course must be taken with an industrial education program. The student can receive multiple credits and a salary. An individual training plan is cooperatively developed and utilized by the teacher coordinator, the employer, and the student. The plan includes identified competencies, objectives, learning activities, evaluation strategies, and provisions for regularly scheduled visits by the teacher coordinator.

PRE REQUISITE: Enrolled in a Workforce Development Industrial Education program.

SPECIAL NOTE: Only one credit per year may be earned.

General Course Information:

	YES	NO	Other
Graduation Requirement		X	
Bright Futures (BF)			
Florida Academic Scholar (FAS)		X	
Florida Medallion Scholar (FMS)		X	
Florida Gold Seal Vocational (FGSV)		X	4 YR 24 CREDIT OPTION ONLY **
State University System (SUS)		X	
National Collegiate Athletic Association (NCAA)		X	
BCPS "Core" Course		X	
Course Level 1=below grade level, 2= at grade level, 3= above grade level			
Industry Credential Eligible		X	
Weighted Quality Points			
State Honors (1 quality point)		X	
BCPS Local Honors ONLY (1 quality point)		X	
Pre IB (1 quality point)		X	
Pre AICE (1 quality point)		X	
AP (Advanced Placement) (2 quality points) *		X	
IB (International Baccalaureate) (2 quality points)		X	
AICE (Advanced International Certificate of Education) (2 quality points)		X	
Technical Dual Enrollment (2 quality points)		X	

* Must take AP exam; otherwise only 1 quality point.

** For the 3-year, 18 credit option, requirements may differ. See your guidance counselor for more information.

Program Title: Machining
Program Number: 8754000
Credits: 10.00
Grade Level: 9-12
Major Concepts/Content

Course Title: Machining 1
Course Number: 87540100
Credit: 1.00
Grade Level: 9-10

Major Concepts/Content

This is the first of ten courses that must be taken sequentially to complete the program. Contents of this program include skill development in the following areas: machining safety and lab practices; mathematical calculations related to machining operations including geometry, application of formulas, measurement of work pieces, calculating machine feed and speed rates and blueprint interpretation; precision measurement with micrometers, dial indicators, calipers and vernier tools; blueprint reading and machine planning, sketching and tool selection; and maintenance of machines and tools.

PRE REQUISITE: NONE

CO REQUISITE: Machining 2

SPECIAL NOTE: Available at Atlantic Technical Center. BF/Gold Seal only

General Course Information:

	YES	NO	Other
Graduation Requirement		X	
Bright Futures (BF)			
Florida Academic Scholar (FAS)		X	
Florida Medallion Scholar (FMS)		X	
Florida Gold Seal Vocational (FGSV)	X		4 YR 24 CREDIT OPTION ONLY **
State University System (SUS)	X		ELECTIVE
National Collegiate Athletic Association (NCAA)		X	
BCPS "Core" Course		X	
Course Level 1=below grade level, 2= at grade level, 3= above grade level			
Industry Credential Eligible		X	
Weighted Quality Points			
State Honors (1 quality point)		X	
BCPS Local Honors ONLY (1 quality point)		X	
Pre IB (1 quality point)		X	
Pre AICE (1 quality point)		X	
AP (Advanced Placement) (2 quality points) *		X	
IB (International Baccalaureate) (2 quality points)		X	
AICE (Advanced International Certificate of Education) (2 quality points)		X	
Technical Dual Enrollment (2 quality points)		X	

* Must take AP exam; otherwise only 1 quality point.

** For the 3-year, 18 credit option, requirements may differ. See your guidance counselor for more information.

Course Title: Machining 2
Course Number: 87540200
Credit: 1.00
Grade Level: 9-10

Major Concepts/Content

This is the second of ten courses that must be taken sequentially to complete the program. Students will learn the proper set up and operation of metal related power saws.

Completion of Machining 1 and 2 comprise Occupational Completion Point A, Machinist Helper.

PRE REQUISITE: NONE

CO REQUISITE: Machining 1

SPECIAL NOTE: Available at Atlantic Technical Center. BF/Gold Seal only

General Course Information:

	YES	NO	Other
Graduation Requirement		X	
Bright Futures (BF)			
Florida Academic Scholar (FAS)		X	
Florida Medallion Scholar (FMS)		X	
Florida Gold Seal Vocational (FGSV)	X		4 YR 24 CREDIT OPTION ONLY **
State University System (SUS)	X		ELECTIVE
National Collegiate Athletic Association (NCAA)		X	
BCPS "Core" Course		X	
Course Level 1=below grade level, 2= at grade level, 3= above grade level			
Industry Credential Eligible		X	
Weighted Quality Points			
State Honors (1 quality point)		X	
BCPS Local Honors ONLY (1 quality point)		X	
Pre IB (1 quality point)		X	
Pre AICE (1 quality point)		X	
AP (Advanced Placement) (2 quality points) *		X	
IB (International Baccalaureate) (2 quality points)		X	
AICE (Advanced International Certificate of Education) (2 quality points)		X	
Technical Dual Enrollment (2 quality points)	X		

* Must take AP exam; otherwise only 1 quality point.

** For the 3-year, 18 credit option, requirements may differ. See your guidance counselor for more information.

Course Title: Machining 3

Course Number: 87540300

Credit: 1.00

Grade Level: 9-10

Major Concepts/Content

This is the third of ten courses that must be taken sequentially to complete the program. Machining 3, 4 and 5 comprise Occupational Completion Point B, Machine Operator

PRE REQUISITE: Machining 1 and 2

CO REQUISITE: Machining 4 and 5

SPECIAL NOTE: Available at Atlantic Technical Center. BF/Gold Seal only

General Course Information:

	YES	NO	Other
Graduation Requirement		X	
Bright Futures (BF)			
Florida Academic Scholar (FAS)		X	
Florida Medallion Scholar (FMS)		X	
Florida Gold Seal Vocational (FGSV)	X		4 YR 24 CREDIT OPTION ONLY **
State University System (SUS)	X		ELECTIVE
National Collegiate Athletic Association (NCAA)		X	
BCPS "Core" Course		X	
Course Level 1=below grade level, 2= at grade level, 3= above grade level			
Industry Credential Eligible		X	
Weighted Quality Points			
State Honors (1 quality point)		X	
BCPS Local Honors ONLY (1 quality point)		X	
Pre IB (1 quality point)		X	
Pre AICE (1 quality point)		X	
AP (Advanced Placement) (2 quality points) *		X	
IB (International Baccalaureate) (2 quality points)		X	
AICE (Advanced International Certificate of Education) (2 quality points)		X	
Technical Dual Enrollment (2 quality points)	X		

* Must take AP exam; otherwise only 1 quality point.

** For the 3-year, 18 credit option, requirements may differ. See your guidance counselor for more information.

Course Title: Machining 4
Course Number: 87540400
Credit: 1.00
Grade Level: 10-11

Major Concepts/Content

This is the fourth of ten courses that must be taken sequentially to complete the program. Students will learn how to set up and operate milling machines. Machining 3, 4, and 5 comprise Occupational Completion Point B, Machine Operator.

PRE REQUISITE: Machining 1 and 2

CO REQUISITE: Machining 3 and 5

SPECIAL NOTE: Available at Atlantic Technical Center. BF/Gold Seal only

General Course Information:

	YES	NO	Other
Graduation Requirement		X	
Bright Futures (BF)			
Florida Academic Scholar (FAS)		X	
Florida Medallion Scholar (FMS)		X	
Florida Gold Seal Vocational (FGSV)	X		4 YR 24 CREDIT OPTION ONLY **
State University System (SUS)		X	
National Collegiate Athletic Association (NCAA)		X	
BCPS "Core" Course		X	
Course Level 1=below grade level, 2= at grade level, 3= above grade level			
Industry Credential Eligible		X	
Weighted Quality Points			
State Honors (1 quality point)		X	
BCPS Local Honors ONLY (1 quality point)		X	
Pre IB (1 quality point)		X	
Pre AICE (1 quality point)		X	
AP (Advanced Placement) (2 quality points) *		X	
IB (International Baccalaureate) (2 quality points)		X	
AICE (Advanced International Certificate of Education) (2 quality points)		X	
Technical Dual Enrollment (2 quality points)	X		

* Must take AP exam; otherwise only 1 quality point.

** For the 3-year, 18 credit option, requirements may differ. See your guidance counselor for more information.

Course Title: Machining 5
Course Number: 87540500
Credit: 1.00
Grade Level: 10-11

Major Concepts/Content

This is the fifth of ten courses that must be taken sequentially to complete the program. Students will learn how to set up and operate grinding machines.

Completion of Machining 3, 4, and 5 comprise Occupational Completion Point B, Machine Operator.

PRE REQUISITE: Machining 1 and 2

CO REQUISITE: Machining 3 and 4

SPECIAL NOTE: Available at Atlantic Technical Center. BF/Gold Seal only

General Course Information:

	YES	NO	Other
Graduation Requirement		X	
Bright Futures (BF)			
Florida Academic Scholar (FAS)		X	
Florida Medallion Scholar (FMS)		X	
Florida Gold Seal Vocational (FGSV)	X		4 YR 24 CREDIT OPTION ONLY **
State University System (SUS)		X	
National Collegiate Athletic Association (NCAA)		X	
BCPS "Core" Course		X	
Course Level 1=below grade level, 2= at grade level, 3= above grade level			
Industry Credential Eligible		X	
Weighted Quality Points			
State Honors (1 quality point)		X	
BCPS Local Honors ONLY (1 quality point)		X	
Pre IB (1 quality point)		X	
Pre AICE (1 quality point)		X	
AP (Advanced Placement) (2 quality points) *		X	
IB (International Baccalaureate) (2 quality points)		X	
AICE (Advanced International Certificate of Education) (2 quality points)		X	
Technical Dual Enrollment (2 quality points)	X		

* Must take AP exam; otherwise only 1 quality point.

** For the 3-year, 18 credit option, requirements may differ. See your guidance counselor for more information.

Course Title: Machining 6
Course Number: 87540600
Credit: 1.00
Grade Level: 10-11

Major Concepts/Content

This is the sixth of ten courses that must be taken sequentially to complete the program. Students will learn to solve job related math problems, interpret blueprints and machine operations, and demonstrate inspection methods.

Machining 6, 7, 8 and 9 comprise Occupational Completion Point C, Machine Setup Operator.

PRE REQUISITE: Machining 1, 2, 3, 4, and 5

CO REQUISITE: Machining 7, 8, and 9

SPECIAL NOTE: Available at Atlantic Technical Center

BF/Gold Seal only, Technical Dual Enrollment

General Course Information:

	YES	NO	Other
Graduation Requirement		X	
Bright Futures (BF)			
Florida Academic Scholar (FAS)		X	
Florida Medallion Scholar (FMS)		X	
Florida Gold Seal Vocational (FGSV)	X		4 YR 24 CREDIT OPTION ONLY **
State University System (SUS)		X	
National Collegiate Athletic Association (NCAA)		X	
BCPS "Core" Course		X	
Course Level 1=below grade level, 2= at grade level, 3= above grade level			
Industry Credential Eligible		X	
Weighted Quality Points			
State Honors (1 quality point)		X	
BCPS Local Honors ONLY (1 quality point)		X	
Pre IB (1 quality point)		X	
Pre AICE (1 quality point)		X	
AP (Advanced Placement) (2 quality points) *		X	
IB (International Baccalaureate) (2 quality points)		X	
AICE (Advanced International Certificate of Education) (2 quality points)		X	
Technical Dual Enrollment (2 quality points)	X		

* Must take AP exam; otherwise only 1 quality point.

** For the 3-year, 18 credit option, requirements may differ. See your guidance counselor for more information.

Course Title: Machining 7
Course Number: 87540700
Credit: 1.00
Grade Level: 10-11

Major Concepts/Content

This is the seventh of ten courses that be taken sequentially to complete the program Students will learn how to operate a computer-numerical-control (CNC) machine.

Machining 6, 7, and 8 comprise Occupational Completion Point C, Machine Setup Operator.

PRE REQUISITE: Machining 1, 2, 3, 4, and 5

CO REQUISITE: Machining 6, 8, and 9

SPECIAL NOTE: Available at Atlantic, Technical Center

BF/Gold Seal only, Technical Dual Enrollment

General Course Information:

	YES	NO	Other
Graduation Requirement		X	
Bright Futures (BF)			
Florida Academic Scholar (FAS)		X	
Florida Medallion Scholar (FMS)		X	
Florida Gold Seal Vocational (FGSV)	X		4 YR 24 CREDIT OPTION ONLY **
State University System (SUS)		X	
National Collegiate Athletic Association (NCAA)		X	
BCPS "Core" Course		X	
Course Level 1=below grade level, 2= at grade level, 3= above grade level			
Industry Credential Eligible		X	
Weighted Quality Points			
State Honors (1 quality point)		X	
BCPS Local Honors ONLY (1 quality point)		X	
Pre IB (1 quality point)		X	
Pre AICE (1 quality point)		X	
AP (Advanced Placement) (2 quality points) *		X	
IB (International Baccalaureate) (2 quality points)		X	
AICE (Advanced International Certificate of Education) (2 quality points)		X	
Technical Dual Enrollment (2 quality points)	X		

* Must take AP exam; otherwise only 1 quality point.

** For the 3-year, 18 credit option, requirements may differ. See your guidance counselor for more information.

Course Title: Machining 8
Course Number: 87540800
Credit: 1.00
Grade Level: 11-12

Major Concepts/Content

This is the eighth of ten courses that must be taken sequentially to complete the program. Students will learn how to set up an electrical discharge machine (EDM).

Machining 6, 7, and 8 comprise Occupational Completion Point C, Machine Setup Operator.

PRE REQUISITE: Machining 1, 2, 3, 4, and 5

CO REQUISITE: Machining 6, 7, and 9

**SPECIAL NOTE: Available at Atlantic Technical Center
 BF/Gold Seal only, Technical Dual Enrollment**

General Course Information:

	YES	NO	Other
Graduation Requirement		X	
Bright Futures (BF)			
Florida Academic Scholar (FAS)		X	
Florida Medallion Scholar (FMS)		X	
Florida Gold Seal Vocational (FGSV)	X		4 YR 24 CREDIT OPTION ONLY **
State University System (SUS)		X	
National Collegiate Athletic Association (NCAA)		X	
BCPS "Core" Course		X	
Course Level 1=below grade level, 2= at grade level, 3= above grade level			
Industry Credential Eligible		X	
Weighted Quality Points			
State Honors (1 quality point)		X	
BCPS Local Honors ONLY (1 quality point)		X	
Pre IB (1 quality point)		X	
Pre AICE (1 quality point)		X	
AP (Advanced Placement) (2 quality points) *		X	
IB (International Baccalaureate) (2 quality points)		X	
AICE (Advanced International Certificate of Education) (2 quality points)		X	
Technical Dual Enrollment (2 quality points)	X		

* Must take AP exam; otherwise only 1 quality point.

** For the 3-year, 18 credit option, requirements may differ. See your guidance counselor for more information.

Course Title: Machining 9
Course Number: 87540900
Credit: 1.00
Grade Level: 10-11

Major Concepts/Content

This is the ninth of ten courses that must be taken sequentially to complete the program. Students will learn how to set up and operate a computer-numerical-control (CNC) machine and use computer aided design/computer aided manufacturing (CAD/CAM). Machining 9 and 10 comprise Occupational Completion Point D, Machinist.

PRE REQUISITE: Machining 1, 2, 3, 4, and 5

CO REQUISITE: Machining 6, 7, and 8

SPECIAL NOTE: Available at Atlantic Technical Center

BF/Gold Seal only, Technical Dual Enrollment

General Course Information:

	YES	NO	Other
Graduation Requirement		X	
Bright Futures (BF)			
Florida Academic Scholar (FAS)		X	
Florida Medallion Scholar (FMS)		X	
Florida Gold Seal Vocational (FGSV)	X		4 YR 24 CREDIT OPTION ONLY **
State University System (SUS)		X	
National Collegiate Athletic Association (NCAA)		X	
BCPS "Core" Course		X	
Course Level 1=below grade level, 2= at grade level, 3= above grade level			
Industry Credential Eligible		X	
Weighted Quality Points			
State Honors (1 quality point)		X	
BCPS Local Honors ONLY (1 quality point)		X	
Pre IB (1 quality point)		X	
Pre AICE (1 quality point)		X	
AP (Advanced Placement) (2 quality points) *		X	
IB (International Baccalaureate) (2 quality points)		X	
AICE (Advanced International Certificate of Education) (2 quality points)		X	
Technical Dual Enrollment (2 quality points)	X		

* Must take AP exam; otherwise only 1 quality point.

** For the 3-year, 18 credit option, requirements may differ. See your guidance counselor for more information.

Course Title: Machining 10
Course Number: 8754091
Credit: 1.00
Grade Level: 11-12

Major Concepts/Content

This is the tenth of ten courses that must be taken sequentially to complete the program. Students will learn how to perform advanced operations using lathes, mills, and grinders. Machining 9 and 10 comprise Occupational Completion Point D, Machinist

PRE REQUISITE: Machining 1, 2, 3, 4, 5, 6, 7, 8, and 9

CO REQUISITE: None

**SPECIAL NOTE: Available only at Atlantic Technical Center
 BF/Gold Seal only, Technical Dual Enrollment**

General Course Information:

	YES	NO	Other
Graduation Requirement		X	
Bright Futures (BF)			
Florida Academic Scholar (FAS)		X	
Florida Medallion Scholar (FMS)		X	
Florida Gold Seal Vocational (FGSV)	X		4 YR 24 CREDIT OPTION ONLY **
State University System (SUS)		X	
National Collegiate Athletic Association (NCAA)		X	
BCPS "Core" Course		X	
Course Level 1=below grade level, 2= at grade level, 3= above grade level			
Industry Credential Eligible	X		
Weighted Quality Points			
State Honors (1 quality point)		X	
BCPS Local Honors ONLY (1 quality point)		X	
Pre IB (1 quality point)		X	
Pre AICE (1 quality point)		X	
AP (Advanced Placement) (2 quality points) *		X	
IB (International Baccalaureate) (2 quality points)		X	
AICE (Advanced International Certificate of Education) (2 quality points)		X	
Technical Dual Enrollment (2 quality points)	X		

* Must take AP exam; otherwise only 1 quality point.

** For the 3-year, 18 credit option, requirements may differ. See your guidance counselor for more information.