

2012-2013
Career and Technical Education
Science, Technology, Engineering & Mathematics 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: Aerospace Technologies (86000800)
Course Title: Aerospace Technologies 1
Course Number: 86005800
Credit: 1.00
Grade Level: 9-12

Major Concepts/Content

This is the first of three courses that must be taken sequentially to complete the program. This course provides students with a foundation of knowledge and technically oriented experiences in the study of the applications of technology and its effects upon our lives and the choosing of an occupation. The complete program consists of Aerospace Technologies 1, 2, and 3.

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 cational (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			2
Industry Credential Eligible			
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.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program

Course Title: Aerospace Technologies 2
Course Number: 86006800
Credit: 1.00
Grade Level: 10-12

Major Concepts/Content

This is the second of three courses that must be taken sequentially to complete the program. This course provides students with a greater understanding of and experiences in the study of the applications of technology and its effects upon our lives and the choosing of an occupation. The complete program consists of Aerospace Technologies 1, 2, and 3.

PRE REQUISITE: Aerospace Technologies 1

General Course Information:

	YES	NO	Other
Graduation Requirement		X	PF
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			3
Industry Credential Eligible			
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.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program

Course Title: Aerospace Technologies 3

Course Number: 86017800

Credit: 1.00

Grade Level: 11-12

Major Concepts/Content

This is the third of three courses that must be taken sequentially to complete the program. This course provides students with advanced individual study related to construction technology systems and subsystems. The complete program consists of Aerospace Technologies 1, 2, and 3.

PRE REQUISITE: Aerospace Technologies 2

General Course Information:

	YES	NO	Other
Graduation Requirement	X		PF
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			3
Industry Credential Eligible			
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.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program

Program Title: **Communications Technology (86010000)**
Course Title: **Communications Technology 1**
Course Number: **86010100**
Credit: **1.00**
Grade Level: **9-12**

Major Concepts/Content

This is the first of three courses that must be taken sequentially to complete the program. This course provides the study of offset reproduction, photography, screen-printing, electrostatic printing, and finishing operations, Internet usage and computer related software. Students will design websites and utilize scanners, digital cameras, and computer-generated imagery to conduct research and provide the technical knowledge and skills in advanced printing. The complete program consists of Communications Technology 1, 2 and 3.

General Course Information:

	YES	NO	Other
Graduation Requirement	X		PF
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			2
Industry Credential Eligible			
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.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program

Course Title: Communications Technology 2

Course Number: 86010200

Credit: 1.00

Grade Level: 10-12

Major Concepts/Content

This is the second of three courses that must be taken sequentially to complete the program. This course provides advanced study of offset production, screen-printing and photography. Activities related to the total production of printed material from layout to final copy. The complete program consists of Communications Technology 1, 2 and 3.

PRE REQUISITE: Communications Technology 1

General Course Information:

	YES	NO	Other
Graduation Requirement	X		PF
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			2
Industry Credential Eligible			
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.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program

Course Title: Communications Technology 3

Course Number: 86010300

Credit: 1.00

Grade Level: 11-12

Major Concepts/Content

This is the third of three courses, which must be taken sequentially to complete the program. This course provides for the advanced individual study related to Graphic Arts utilizing skills from Communications Technology 1 and Communications Technology 2 courses. The complete program consists of Communications Technology 1, 2 and 3.

PRE REQUISITE: Communications Technology 2

General Course Information:

	YES	NO	Other
Graduation Requirement	X		PF
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			3
Industry Credential Eligible			
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.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program

Program Title: Construction Technology (86007000)
Course Title: Construction Technology 1
Course Number: 86007100
Credit: 1.00
Grade Level: 9-12

Major Concepts/Content

This is the first of three courses that must be taken sequentially to complete the program. This course provides students with a foundation of knowledge and technically oriented experiences in construction technology including tools, materials, processes, design and testing, safety, entrepreneurship and leadership skills. The complete program consists of Construction Technology 1, 2, and 3.

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			2
Industry Credential Eligible			
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.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program

Course Title: Construction Technology 2

Course Number: 86007200

Credit: 1.00

Grade Level: 10-12

Major Concepts/Content

This is the second of three courses that must be taken sequentially to complete the program. This course provides an advanced in-depth program of study and hands-on activities related to designing, planning, and constructing a structure on site. The complete program consists of Construction Technology 1, Construction Technology 2, and Construction Technology 3.

PRE REQUISITE: Construction Technology1

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			2
Industry Credential Eligible			
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.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program

Course Title: Construction Technology 3

Course Number: 86007300

Credit: 1.00

Grade Level: 11-12

Major Concepts/Content

This is the third of three courses that must be taken sequentially to complete the program. This course provides students with advanced individual study related to construction technology systems and subsystems. The complete program consists of Construction Technology 1, Construction Technology 2, and Construction Technology 3.

PRE REQUISITE: Construction Technology 2

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			3
Industry Credential Eligible			
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.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program

Program Title: ~~Engineering Technology (86070000)~~

Course Title: ~~Engineering Technology 1~~

Course Number: ~~86005700~~

Credit: ~~1.00~~

Grade Level: ~~9-12~~

Major Concepts/Content

~~This course is the first of three courses required to complete the program that must be scheduled sequentially. This course provides the study of the applications of engineering and its effect upon our lives and the choosing of an occupation. It explores the usage of Industry Standard-based software applications to provide a greater understanding of this field and its related occupations. The complete program consists of Engineering Technology 1, 2 and 3.~~

General Course Information:

	YES	NO	Other
Graduation Requirement	X		VO
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			2
— 1=below grade level, — 2= at grade level, — 3= above grade level			
Industry Credential Eligible			
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.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program

Course Title: ~~Engineering Technology 2~~

Course Number: ~~86006700~~

Credit: ~~1.00~~

Grade Level: ~~10-12~~

Major Concepts/Content

~~This course is the second of three courses required to complete the program that must be taken sequentially. This course provides the study of the applications of engineering and its effect upon our lives and the choosing of an occupation. The continued study of Industry Standard-based software applications provides a greater understanding of this field and its related occupations. The complete program consists of Engineering Technology 1, 2 and 3.~~

~~**PRE REQUISITE:** *Engineering Technology 1*~~

General Course Information:

	YES	NO	Other
Graduation Requirement	X		VO
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			3
Industry Credential Eligible			
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.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program

Course Title: ~~Engineering Technology 3~~

Course Number: ~~86017700~~

Credit: ~~1.00~~

Grade Level: ~~11-12~~

Major Concepts/Content

~~This course is the third of three courses required to complete the program that must be taken sequentially. This course provides for the advanced individual study related to Industry Standard-based software applications and practices, utilizing skills gained from Engineering Technology 1 & 2. The complete program consists of Engineering Technology 1, 2 and 3.~~

~~**PRE REQUISITE:** *Engineering Technology 2*~~

General Course Information:

	YES	NO	Other
Graduation Requirement	X		VO
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			3
— 1=below grade level,			
— 2= at grade level,			
— 3= above grade level			
Industry Credential Eligible			
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.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program

Program Title: Materials and Processes Technology (86011000)

Course Title: Materials and Processes Technology 1

Course Number: 86011100

Credit: 1.00

Grade Level: 9-12

Major Concepts/Content

This is the first of three courses that must be taken sequentially to complete the program. The purpose of this course is to provide students with a foundation of knowledge and technically oriented experience in the study of the technology of materials and processes. While operating tools and machines students will work with a variety of materials including wood, plastic, metal composite and other material. Business ownership and operation, safety and leadership skills are also included in this activity filled program. The complete program consists of Materials and Processes Technology 1, Materials and Processes Technology 2 and Materials and Processes Technology 3.

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			2
Industry Credential Eligible			
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.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program

Course Title: Materials and Processes Technology 2

Course Number: 86011200

Credit: 1.00

Grade Level: 10-12

Major Concepts/Content

This is the second of three courses that must be taken sequentially to complete the program. This course provides advanced study related to selected industrial materials and processes. Skills acquired in the basic course are expanded through computer interaction and increasingly complex project. The complete program consists of Materials and Processes Technology 1, Materials and Processes Technology 2 and Materials and Processes Technology 3.

PRE REQUISITE: Materials and Processes Technology 1

General Course Information:

	YES	NO	Other
Graduation Requirement	X		VO
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			2
Industry Credential Eligible			
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.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program

Course Title: Materials and Processes Technology 3

Course Number: 86011300

Credit: 1.00

Grade Level: 11-12

Major Concepts/Content

This is the third of three courses that must be taken sequentially to complete the program. This course provides advanced study related to selected industrial materials and processes. In addition to improving skills acquired in the basic course and intermediate levels, students design and conduct research and experimentation projects, perform materials testing and apply problem solving processes to various projects. The complete program consists of Materials and Processes Technology 1, Materials and Processes Technology 2 and Materials and Processes Technology 3.

PRE REQUISITE: Materials and Processes Technology 2

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			3
Industry Credential Eligible			
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 **Program**

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program

Title: Pathways to Engineering - Aerospace Engineering (94003000)

Course Title: Introduction to Engineering Design

Course Number: 86005500

Credit: 1.00

Grade Level: 9-12

Major Concepts/Content

This is the first of four courses that must be taken sequentially to complete the program. This course provides students with a foundation of knowledge and technically oriented experiences in the study of the applications of technology and its effects upon our lives and the choosing of an occupation. Students will use teaming concepts to study various engineering technologies. This course satisfies the computer requirement needed for graduation. The complete program consists of Introduction to Engineering Design, Principles of Engineering, Aerospace Engineering and Engineering Design and Development.

General Course Information:

	YES	NO	Other
Graduation Requirement	X		PF
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			2
Industry Credential Eligible			
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.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program

Course Title: Principles of Engineering

Course Number: 86005200

Credit: 1.00

Grade Level: 10-12

Major Concepts/Content

This is the second of four courses that must be taken sequentially to complete the program. This course helps students understand the field of engineering/engineering technology. Exploring various technology systems and manufacturing processes help students learn how engineers and technicians use math, science, and technology in an engineering problem solving process to benefit people. The course also includes concerns about social and political consequences of technological change. The complete program consists of Introduction to Engineering Design, Principles of Engineering, Aerospace Engineering and Engineering Design and Development.

PRE REQUISITE: Introduction to Engineering Design

General Course Information:

	YES	NO	Other
Graduation Requirement	X		PF
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			3
Industry Credential Eligible			
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.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program

Course Title: Aerospace Engineering

Course Number: 86006200

Credit: 1.00

Grade Level: 11-12

Major Concepts/Content

This is the third of four courses that must be taken sequentially to complete the program. This course applies principles being employed within the Aerospace industry. The course builds on computer solid modeling skills and aerodynamics principles studied in the previous two courses. Students use CNC, Laser Cutter and Rapid Prototyper equipment to produce actual models of their three-dimensional designs. Fundamental concepts of aeronautics and rocketry manufacturing, and design analysis are included. The complete program consists of Introduction to Engineering Design, Principles of Engineering, Aerospace Engineering and Engineering Design and Development.

PRE REQUISITE: Principles of Engineering

General Course Information:

	YES	NO	Other
Graduation Requirement	X		PF
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			3
Industry Credential Eligible			
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.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program

Course Title: Engineering Design and Development

Course Number: 86006500

Credit: 1.00

Grade Level: 12

Major Concepts/Content

This is the last of four courses that must be taken sequentially to complete the program. This course helps students understand the field of engineering/engineering technology. Exploring various technology systems and manufacturing processes help students learn how engineers and technicians use math, science, and technology in an engineering problem solving process to benefit people. The course also includes concerns about social and political consequences of technological change. The complete program consists of Introduction to Engineering Design, Principles of Engineering, Aerospace Engineering and Engineering Design and Development.

PRE REQUISITE: Aerospace Engineering

General Course Information:

	YES	NO	Other
Graduation Requirement	X		PF
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			3
Industry Credential Eligible			
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.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program

Program Title: Pathways to Engineering - Biotechnical Engineering (94003000)
Course Title: Introduction to Engineering Design
Course Number: 86005500
Credit: 1.00
Grade Level: 9-12

Major Concepts/Content

This is the first of four courses that must be taken sequentially to complete the program. This course provides students with a foundation of knowledge and technically oriented experiences in the study of the applications of technology and its effects upon our lives and the choosing of an occupation. Students will use teaming concepts to study various engineering technologies. This course satisfies the computer requirement needed for graduation. The complete program consists of Introduction to Engineering Design, Principles of Engineering, Biotechnical Engineering and Engineering Design and Development.

General Course Information:

	YES	NO	Other
Graduation Requirement	X		PF
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			2
Industry Credential Eligible			
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.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program

Course Title: Principles of Engineering
Course Number: 86005200
Credit: 1.00
Grade Level: 10-12

Major Concepts/Content

This is the second of four courses that must be taken sequentially to complete the program. This course helps students understand the field of engineering/engineering technology. Exploring various technology systems and manufacturing processes help students learn how engineers and technicians use math, science, and technology in an engineering problem solving process to benefit people. The course also includes concerns about social and political consequences of technological change. The complete program consists of Introduction to Engineering Design, Principles of Engineering, Biotechnical Engineering and Engineering Design and Development.

PRE REQUISITE: Introduction to Engineering Design

General Course Information:

	YES	NO	Other
Graduation Requirement	X		PF
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			3
Industry Credential Eligible			
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.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program

Course Title: Biotechnical Engineering

Course Number: 86006300

Credit: 1.00

Grade Level: 11-12

Major Concepts/Content

This is the third of four courses that must be taken sequentially to complete the program. This course applies principles relating to the field of biotechnology. The course builds on research-based skills developed in the previous two courses. Students use state-of-the-art equipment to obtain current industry skills. The complete program consists of Introduction to Engineering Design, Principles of Engineering, Biotechnical Engineering and Engineering Design and Development.

PRE REQUISITE: Principles of Engineering

General Course Information:

	YES	NO	Other
Graduation Requirement	X		PF
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			3
Industry Credential Eligible			
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.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program

Course Title: Engineering Design and Development

Course Number: 86006500

Credit: 1.00

Grade Level: 12

Major Concepts/Content

This is the last of four courses that must be taken sequentially to complete the program. This course helps students understand the field of engineering/engineering technology. Exploring various technology systems and manufacturing processes help students learn how engineers and technicians use math, science, and technology in an engineering problem solving process to benefit people. The course also includes concerns about social and political consequences of technological change. The complete program consists of Introduction to Engineering Design, Principles of Engineering, Biotechnical Engineering and Engineering Design and Development.

PRE REQUISITE: Biotechnical Engineering

General Course Information:

	YES	NO	Other
Graduation Requirement	X		PF
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			3
Industry Credential Eligible			
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.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program

Program Title: Pathways to Engineering - Civil Engineer. & Architecture (94003000)
Course Title: Introduction to Engineering Design
Course Number: 86005500
Credit: 1.00
Grade Level: 9-12
Major Concepts/Content

This is the first of four courses that must be taken sequentially to complete the program. This course provides students with a foundation of knowledge and technically oriented experiences in the study of the applications of technology and its effects upon our lives and the choosing of an occupation. Students will use teaming concepts to study various engineering technologies. This course satisfies the computer requirement needed for graduation. The complete program consists of Introduction to Engineering Design, Principles of Engineering, Civil Engineering and Architecture and Engineering Design and Development.

General Course Information:

	YES	NO	Other
Graduation Requirement	X		PF
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			2
Industry Credential Eligible			
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.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program

Course Title: Principles of Engineering
Course Number: 86005200
Credit: 1.00
Grade Level: 10-12

Major Concepts/Content

This is the second of four courses that must be taken sequentially to complete the program. This course helps students understand the field of engineering/engineering technology. Exploring various technology systems and manufacturing processes help students learn how engineers and technicians use math, science, and technology in an engineering problem solving process to benefit people. The course also includes concerns about social and political consequences of technological change. The complete program consists of Introduction to Engineering Design, Principles of Engineering, Civil Engineering and Architecture and Engineering Design and Development.

PRE REQUISITE: Introduction to Engineering Design

General Course Information:

	YES	NO	Other
Graduation Requirement	X		PF
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			3
Industry Credential Eligible			
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.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program

Course Title: Civil Engineering and Architecture

Course Number: 8600590

Credit: 1.00

Grade Level: 11-12

Major Concepts/Content

This is the third of four courses that must be taken sequentially to complete the program. This course applies principles and best practices used within the fields of civil engineering and architecture. The course builds on computer drafting and solid modeling skills developed in the previous two courses. Students use student-generated, along with computerized machinery, to produce actual models of their three-dimensional designs. The complete program consists of Introduction to Engineering Design, Principles of Engineering, Civil Engineering and Architecture and Engineering Design and Development.

PRE REQUISITE: Principles of Engineering

General Course Information:

	YES	NO	Other
Graduation Requirement	X		PF
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			3
Industry Credential Eligible			
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.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program

Course Title: Engineering Design and Development

Course Number: 86006500

Credit: 1.00

Grade Level: 12

Major Concepts/Content

This is the last of four courses that must be taken sequentially to complete the program. This course helps students understand the field of engineering/engineering technology. Exploring various technology systems and manufacturing processes help students learn how engineers and technicians use math, science, and technology in an engineering problem solving process to benefit people. The course also includes concerns about social and political consequences of technological change. The complete program consists of Introduction to Engineering Design, Principles of Engineering, Civil Engineering and Architecture and Engineering Design and Development.

PRE REQUISITE: Civil Engineering and Architecture

General Course Information:

	YES	NO	Other
Graduation Requirement	X		PF
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			3
Industry Credential Eligible			
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.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program

Program Title: Pathways to Engineering - Comp. Integrated Manufact. (94003000)
Course Title: Introduction to Engineering Design
Course Number: 86005500
Credit: 1.00
Grade Level: 9-12

Major Concepts/Content

This is the first of four courses that must be taken sequentially to complete the program. This course provides students with a foundation of knowledge and technically oriented experiences in the study of the applications of technology and its effects upon our lives and the choosing of an occupation. Students will use teaming concepts to study various engineering technologies. This course satisfies the computer requirement needed for graduation. The complete program consists of Introduction to Engineering Design, Principles of Engineering, Computer Integrated Manufacturing and Engineering Design and Development.

General Course Information:

	YES	NO	Other
Graduation Requirement	X		PF
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			2
Industry Credential Eligible			
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.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program

Course Title: Principles of Engineering

Course Number: 86005200

Credit: 1.00

Grade Level: 10-12

Major Concepts/Content

This is the second of four courses that must be taken sequentially to complete the program. This course helps students understand the field of engineering/engineering technology. Exploring various technology systems and manufacturing processes help students learn how engineers and technicians use math, science, and technology in an engineering problem solving process to benefit people. The course also includes concerns about social and political consequences of technological change. The complete program consists of Introduction to Engineering Design, Principles of Engineering, Computer Integrated Manufacturing and Engineering Design and Development.

PRE REQUISITE: Introduction to Engineering Design

General Course Information:

	YES	NO	Other
Graduation Requirement	X		PF
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			3
Industry Credential Eligible			
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.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program

Course Title: Computer Integrated Manufacturing

Course Number: 8600560

Credit: 1.00

Grade Level: 11-12

Major Concepts/Content

This is the third of four courses that must be taken sequentially to complete the program. This course applies principles of robotics and automation. The course builds on computer solid modeling skills developed in the previous two courses. Students use CNC equipment to produce actual models of their three-dimensional designs. Fundamental concepts of robotics used in automated manufacturing, and design analysis are included. The complete program consists of Introduction to Engineering Design, Principles of Engineering, Computer Integrated Manufacturing and Engineering Design and Development.

PRE REQUISITE: Principles of Engineering

General Course Information:

	YES	NO	Other
Graduation Requirement	X		PF
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			3
Industry Credential Eligible			
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.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program

Course Title: Engineering Design and Development

Course Number: 86006500

Credit: 1.00

Grade Level: 12

Major Concepts/Content

This is the last of four courses that must be taken sequentially to complete the program. This course helps students understand the field of engineering/engineering technology. Exploring various technology systems and manufacturing processes help students learn how engineers and technicians use math, science, and technology in an engineering problem solving process to benefit people. The course also includes concerns about social and political consequences of technological change. The complete program consists of Introduction to Engineering Design, Principles of Engineering, Computer Integrated Manufacturing and Engineering Design and Development.

PRE REQUISITE: Computer Integrated Manufacturing

General Course Information:

	YES	NO	Other
Graduation Requirement	X		PF
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			3
Industry Credential Eligible			
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.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program

Program Title: Pathways to Engineering - Digital Electronics (94003000)

Course Title: Introduction to Engineering Design

Course Number: 86005500

Credit: 1.00

Grade Level: 9-12

Major Concepts/Content

This is the first of four courses that must be taken sequentially to complete the program. This course provides students with a foundation of knowledge and technically oriented experiences in the study of the applications of technology and its effects upon our lives and the choosing of an occupation. Students will use teaming concepts to study various engineering technologies. This course satisfies the computer requirement needed for graduation. The complete program consists of Introduction to Engineering Design, Principles of Engineering, Digital Electronics and Engineering Design and Development.

General Course Information:

	YES	NO	Other
Graduation Requirement	X		PF
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			2
Industry Credential Eligible			
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.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program

Course Title: Principles of Engineering

Course Number: 86005200

Credit: 1.00

Grade Level: 10-12

Major Concepts/Content

This is the second of four courses that must be taken sequentially to complete the program. This course helps students understand the field of engineering/engineering technology. Exploring various technology systems and manufacturing processes help students learn how engineers and technicians use math, science, and technology in an engineering problem solving process to benefit people. The course also includes concerns about social and political consequences of technological change. The complete program consists of Introduction to Engineering Design, Principles of Engineering, Digital Electronics and Engineering Design and Development.

PRE EQUISITE: Introduction to Engineering Design

General Course Information:

	YES	NO	Other
Graduation Requirement	X		PF
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			3
Industry Credential Eligible			
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.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program

Course Title: Digital Electronics
Course Number: 8600530
Credit: 1.00
Grade Level: 11-12

Major Concepts/Content

This is the third of four courses that must be taken sequentially to complete the program. This course applies principles of robotics and automation. The course builds on computer solid modeling skills developed in the previous two courses. Students use CNC equipment to produce actual models of their three-dimensional designs. Fundamental concepts of robotics used in automated manufacturing, and design analysis are included. The complete program consists of Introduction to Engineering Design, Principles of Engineering, Digital Electronics and Engineering Design and Development.

PRE REQUISITE: Principles of Engineering

General Course Information:

	YES	NO	Other
Graduation Requirement	X		PF
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			3
Industry Credential Eligible			
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.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program

Course Title: Engineering Design and Development
Course Number: 86006500
Credit: 1.00
Grade Level: 12

Major Concepts/Content

This is the last of four courses that must be taken sequentially to complete the program. This course helps students understand the field of engineering/engineering technology. Exploring various technology systems and manufacturing processes help students learn how engineers and technicians use math, science, and technology in an engineering problem solving process to benefit people. The course also includes concerns about social and political consequences of technological change. The complete program consists of Introduction to Engineering Design, Principles of Engineering, Digital Electronics and Engineering Design and Development.

PRE REQUISITE: Digital Electronics

General Course Information:

	YES	NO	Other
Graduation Requirement	X		PF
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			3
Industry Credential Eligible			
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.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program

Program Title: Production Technology (86040000)

Course Title: Production Technology 1

Course Number: 86005400

Credit: 1.00

Grade Level: 9-12

Major Concepts/Content

This is the first of three courses that must be taken sequentially to complete the program. This course provides students with a foundation of knowledge and technically oriented experiences in the study of the manufacturing technology and its effects upon our lives and the choosing of an occupation. The complete program consists of Production Technology 1, Production Technology 2, and Production Technology 3.

General Course Information:

	YES	NO	Other
Graduation Requirement	X		PF
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			2
Industry Credential Eligible			
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.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program

Course Title: Production Technology 2

Course Number: 86006400

Credit: 1.00

Grade Level: 10-12

Major Concepts/Content

This is the second of three courses that must be taken sequentially to complete the program. This program focuses on transferable skills and stresses understanding and demonstration of the technological tools, machines, instruments, materials, processes and systems in business and industry. The complete program consists of Production Technology 1, Production Technology 2, and Production Technology 3.

PRE REQUISITE: Production Technology 1

General Course Information:

	YES	NO	Other
Graduation Requirement	X		PF
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			2
Industry Credential Eligible			
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.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program

Course Title: Production Technology 3

Course Number: 86017400

Credit: 1.00

Grade Level: 11-12

Major Concepts/Content

This is the third of three courses that must be taken sequentially to complete the program. This course provides students with advanced individual study related to manufacturing technology. The complete program consists of Production Technology 1, Production Technology 2, and Production Technology 3.

PRE REQUISITE: Production Technology 2

General Course Information:

	YES	NO	Other
Graduation Requirement	X		PF
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			3
Industry Credential Eligible			
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.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program

Program Title: Scientific Visualization (94001000)
Course Title: Introduction to Information Technology
Course Number: 82073100
Credit: 1.00
Grade Level: 9-12

Major Concepts/Content

This is the first of five courses that must be taken sequentially to complete the program. This course provides an introduction to information technology concepts and careers as well as the impact information technology has on the world, people, and industry and basic web design concepts. The content includes information technology career research; operating systems and software applications; electronic communications including e-mail and Internet services; basic HTML, DHMTL, and XML commands; emerging technologies; and web page design. This course satisfies the computer requirement needed for graduation. The complete program consists of Introduction to Information Technology, Principles of Scientific Visualization, Data Modeling, Advanced Applications in Scientific Visualization and SciViz Internship.

PRE REQUISITE: None

SPECIAL NOTE: This program is offered only at Pompano Beach High School Institute of International Studies.

General Course Information:

	YES	NO	Other
Graduation Requirement	X		PF
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			2
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.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program

Course Title: Principles of Scientific Visualization

Course Number: 94001100

Credit: 1.00

Grade Level: 10-12

Major Concepts/Content

This is the second of five courses that must be taken sequentially to complete the program. This course provides students with a foundation of knowledge and technically oriented experiences in the study of the applications of technology and its effects upon our lives and the choosing of an occupation. Students will use teaming concepts to study various engineering technologies. This course is designed to aid students in the use of computer solid modeling. The complete program consists of Introduction to Information Technology, Principles of Scientific Visualization, Data Modeling, Advanced Applications in Scientific Visualization and SciViz Internship.

PRE REQUISITE: Introduction to Information Technology

SPECIAL NOTE: This program is offered only at Pompano Beach High School Institute of International Studies.

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			3
Industry Credential Eligible			
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.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program

Course Title: Data Modeling

Course Number: 94001200

Credit: 1.00

Grade Level: 10-12

Major Concepts/Content

This is the third of five courses that must be taken sequentially to complete the program. This course helps students understand the field of engineering/engineering technology. The course helps students learn how engineers and technicians use math, science, and technology in an engineering problem solving process to benefit people. This course is designed to aid students in the use of computer solid modeling, refining skills developed in the previous course. The complete program consists of Introduction to Information Technology, Principles of Scientific Visualization, Data Modeling, Advanced Applications in Scientific Visualization and SciViz Internship.

PRE REQUISITE: Principles of Scientific Visualization

SPECIAL NOTE: This program is offered only at Pompano Beach High School Institute of International Studies.

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			3
Industry Credential Eligible			
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.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program

Course Title: **Advanced Applications in Scientific Visualization**
Course Number: **94001300**
Credit: **1.00**
Grade Level: **11-12**

Major Concepts/Content

This is the fourth of five courses that must be taken sequentially to complete the program. This course builds on computer solid modeling skills developed in the previous two courses. Students produce actual models of their three-dimensional designs. Fundamental concepts of design analysis are included. The complete program consists of Introduction to Information Technology, Principles of Scientific Visualization, Data Modeling, Advanced Applications in Scientific Visualization and SciViz Internship.

PRE REQUISITE: *Data Modeling*

SPECIAL NOTE: *This program is offered only at Pompano Beach High School Institute of International Studies.*

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			3
Industry Credential Eligible			
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.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program

Course Title: SciViz Internship

Course Number: 94001400

Credit: 1.00

Grade Level: 12

Major Concepts/Content

This is the last of five courses that must be taken sequentially to complete the program. This course provides an opportunity for students to develop human relations, communications, and employability skills needed to secure a position in this specific Technology work environment. Students enhance and apply competencies learned in the classroom through the internship experience. The complete program consists of Introduction to Information Technology, Principles of Scientific Visualization, Data Modeling, Advanced Applications in Scientific Visualization and SciViz Internship.

PRE REQUISITE: *Advanced Applications in Scientific Visualization*

SPECIAL NOTE: *This program is offered only at Pompano Beach High School Institute of International Studies.*

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			2
Industry Credential Eligible			
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.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program

Program Title: ~~Technology Studies~~
Program Number: ~~86001000~~
Credit: ~~3.00~~
Grade Level: ~~9-12~~
Course Title: ~~Technology Studies I~~
Course Number: ~~86005100~~
Credit: ~~1.00~~
Grade Level: ~~9-12~~

Major Concepts/Content

~~This is the first of three courses that must be taken sequentially to complete the program. This course provides students with a foundation of knowledge and technically oriented experiences in the study of the applications of technology and its effects upon our lives and the choosing of an occupation. The complete program consists of Technology Studies 1, Technology Studies 2 and Technology Studies 3.~~

General Course Information:

	YES	NO	Other
Graduation Requirement	X		VO
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			2
— 1= below grade level, — 2= at grade level, — 3= above grade level			
Industry Credential Eligible			
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.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program

Course Title: ~~Technology Studies 2~~

Course Number: ~~86006100~~

Credit: ~~1.00~~

Grade Level: ~~10-12~~

Major Concepts/Content

~~This is the second of three courses that must be taken sequentially to complete the program. This course provides students with a greater understanding of and experiences in the study of the applications of technology and its effects upon our lives and the choosing of an occupation. The complete program consists of Technology Studies 1, Technology Studies 2 and Technology Studies 3.~~

~~**PRE REQUISITE: Technology Studies 1**~~

General Course Information:

	YES	NO	Other
Graduation Requirement	X		VO
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			2
— 1=below grade level,			
— 2= at grade level,			
— 3= above grade level			
Industry Credential Eligible			
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.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program

Course Title: ~~Technology Studies 3~~

Course Number: ~~86017100~~

Credit: ~~1.00~~

Grade Level: ~~11-12~~

Major Concepts/Content

~~This is the third of three courses that must be taken sequentially to complete the program. This course provides students with advanced individual study related to technology systems and subsystems. The complete program consists of Technology Studies 1, Technology Studies 2 and Technology Studies 3.~~

~~**PRE-REQUISITE:** Technology Studies 2~~

General Course Information:

	YES	NO	Other
Graduation Requirement	X		VO
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			2
— 1=below grade level, — 2= at grade level, — 3= above grade level			
Industry Credential Eligible			
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.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program

Supplemental Courses

Course Title: **Advanced Applications in Technology**

Course Number: **86019000**

Credit: **Multiple**

Grade Level: **11-12**

Major Concepts/Content

This course provides Technology Education students the opportunity, as student learners, to gain additional experiences through a structured and comprehensive independent study offering. This course is designed to give the student learners an opportunity to apply and integrate the knowledge, skills, and ability acquired during their previous offerings.

PRE REQUISITE: *Currently enrolled in or have completed the third course in an appropriate Technology Education Program.*

General Course Information:

	YES	NO	Other
Graduation Requirement	X		PF
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			3
Industry Credential Eligible			
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.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program

Course Title: Technology Education/Work-Based Experience

Course Number: 86018000

Credit: Multiple

Grade Level: 11-12

Major Concepts/Content

This course provides Technology Education students the opportunity, as student learners, to gain practical, first-hand experiences in broad occupational clusters or industry sectors through a structured and comprehensive work-based experience. This course is designed to give the student learners an opportunity to apply and integrate the knowledge, skills, and ability acquired during their school-based experiences to actual work situations.

PRE REQUISITE: *Currently enrolled in or have completed the first course in an appropriate Technology Education Program.*

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			2
Industry Credential Eligible			
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.

All information contained in this Curriculum Guide is subject to change. For current information, please visit the respective websites for each program