Skills-to-Course Matrix

Information Technology

Southridge High School Portland Community College Mar-19

CCTC* Code Number

IT01

IT02

IT03

IT04

IT05

IT06

IT07

1T08

IT09

IT10

IT11

IT 01

IT 02

IT 03

IT 04

IT 05

IT 06

IT 07

80 TI

IT 9

IT 10

IT 11

IT 12

Information & Communications Technology Cluster

Instructions: 1) Enter the Program of Study name above. 2) Enter your high school name. 3) Enter the community college name. 4) Enter the date. 5) Click on the cell for Course 1 Name, Course 2 Name, etc., and replace with your POS course names--secondary and first year of post-secondary. 6) Enter school course numbers. 7) Enter NCES code for the course (secondary only). 8) Enter number of credits awarded. 9) Identify those courses that trigger the TSA for this POS. 10) Finally, check those standards that are taught with intent and purpose, and are assessed in each course. Note: The optional Focus Area tabs below are included for those POSs that have a very specific industry fociusare using those skill sets for multiple options in a Progam of Study or if you want to use another set of industry validated standards.

Cluster Knowledge and Skills (CTE standards)

Explain the implications of IT on business development.

enable positive customer relationships.

practices and behaviors.

influence on IT practices.

security requirements.

information technology (IT) product or service.

providing quality IT products and services.

technology crimes and security breaches.

strategies for computer systems.

KS Statement

Demonstrate effective professional communication skills and practices that

Use product or service design processes and guidelines to produce a quality

Demonstrate the use of cross-functional teams in achieving IT project goals.

Demonstrate positive cyber citizenry by applying industry accepted ethical

Describe trends in emerging and evolving computer technologies and their

Perform standard computer backup and restore procedures to protect IT

Describe the use of computer forensics to prevent and solve information

Demonstrate knowledge of the hardware components associated with

Recognize and analyze potential IT security threats to develop and maintain

Describe quality assurance practices and methods employed in producing and

Compare key functions and applications of software and determine maintenance

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Computer H	Web Design	Neb Design 2	Game Design \ Intro	Game Design 2	Java Programming 1	Java Progamning 2	Robotics 1	Robotics 2	
A423X	A431X	A432X	A445X	A446X	A459X	A463X	A562X	A563X	
10251	10201	10201	10160	10160	10155	10155	21009	21009	
0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
N	N	N	N	N	N	Υ	N	N	
					х	х			
Х									
Х									
	X	X			x	x			
Х									
х									
x									
Х									
X									

Skills-to-Course Matrix

Information Technology Southridge High School Portland Community College

Mar-19

CCTC*

IT-SUP 02

IT-SUP 03

IT-SUP 04

IT-SUP 05

IT-SUP 06

IT-SUP 07

IT-SUP 08

IT-SUP 09

IT-SUP 10

Information Support Services Focus Area

Instructions: 1) Enter the Program of Study name above. 2) Enter your high school name. 3) Enter the community college name. 4) Enter the date. 5) Click on the cell for Course 1 Name, Course 2 Name, etc., and replace with your POS course names-secondary and first year of post-secondary. 6) Enter school course numbers. 7) Enter NCES code for the course (secondary only). 8) Enter number of credits awarded. 9) Identify those courses that trigger the TSA for this POS. 10) Finally, check those standards that are taught with intent and purpose, and are assessed in each course. Note: The optional Focus Area tabs below are included for those POSs that have a very specific industry fociusare using those skill sets for multiple options in a Progam of Study or if you want to use another set of industry validated standards.

th O fic	at are <u>taught</u> otional Focus industry focit	with intent and purpose, and are assessed in each course. Area tabs below are included for those POSs that have a sare using those skill sets for multiple options in a Progam of a another set of industry validated standards.	Computer Ha	Meh Design A431X	Neb Design 2 A432X	Game Design All A445X	Game Design 2 A446X	Java Programmin A459X	Java Progamnings A463X	Robotics A	Robotics 2 A563X	
			10251	10201	10201	10160	10160	10155	10155	21009	21009	
	Focus Are	Knowledge and Skills (CTE standards)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
	Code Number	KS Statement	N	N	N	N	N	N	Υ	N	N	
	ITSS01	Provide technology support to maintain service.	X									
2	ITSS02	Manage operating systems and software applications, including maintenance of upgrades, patches and service packs.	X									
}	ITSS03	Apply appropriate troubleshooting techniques in resolving computer hardware, software and configuration problems.	X									
	ITSS04	Perform installation, configuration and maintenance of operating systems.	X									
,	ITSS05	Demonstrate the use of networking concepts to develop a network.	x									
;	ITSS06	Evaluate the effectiveness of an information system.										
	ITSS07	Employ system installation and maintenance skills to set-up and maintain an information system.	x									
3	ITSS08	Employ system administration and control skills to monitor the performance of an information system.	X									
	IFPC09	Employ technical writing and documentation skills in support of an information system.										
	IFPC10	Apply quality assurance processes to maximize information system operation.										

Skills-to-Course Matrix

Information Technology

Southridge High School Portland Community College Mar-19

ITNW05

network system.

CCTC*

IT- NET 1

IT-NET 2

IT-NET 3

IT-NET 4

IT-NET 5

Network Systems Focus Area

Instructions: 1) Enter the Program of Study name above. 2) Enter your high school name. 3) Enter the community college name. 4) Enter the date. 5) Click on the cell for Course 1 Name, Course 2 Name, etc., and replace with your POS course names-secondary and first year of post-secondary. 6) Enter school course numbers. 7) Enter NCES code for the course (secondary only). 8) Enter number of credits awarded. 9) Identify those courses that trigger the TSA for this POS. 10) Finally, check those standards that are taught with intent and purpose, and are assessed in each course. Note: The optional Focus Area tabs below are included for those POSs that have a very specific industry fociusare using those skill sets
Study or if you want to use another set of industry very

de for the course (secondary only). 8) Enter number of credits awarded. 9) lose courses that trigger the TSA for this POS. 10) Finally, check those is that are taught with intent and purpose, and are assessed in each course. It is optional Focus Area tabs below are included for those POSs that have a lific industry fociusare using those skill sets for multiple options in a Progam of f you want to use another set of industry validated standards.			Computer H	ardinare Neb Design	Web Design 2	Game Design 1 (Intro)	Game Design 2	Java Programming 1	Java Progamning 2	Robotics 1	Robotics 2	(Course of Warre)
			A423X	A431X	A432X	A445X	A446X	A459X	A463X	A562X	A563X	[Course Number]
			10251	10201	10201	10160	10160	10155	10155	21009	21009	[NCES Code]
	Focus Are	a Knowledge and Skills (CTE standards)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	[# of Credits]
	Code Number	KS Statement	N	N	N	N	N	N	Υ	N	N	[TSAY or N?]
	ITNW01	Analyze customer or organizational network system needs and requirements.	х									
	ITNW02	Analyze wired and wireless network systems to determine if they meet specifications (e.g., IEEE, power, security).	х									
,	ITNW03	Design a network system using technologies, tools and standards.	Х									
	ITNW04	Perform network system installation and configuration.	Χ									
;	ITNW05	Perform network administration, monitoring and support to maintain a	,									

Skills-to-Course Matrix

Information Technology

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CCTC* Code Number

ICXE02

ITPG03

ITPG04

ITPG05

ITPG06

ITPG07

ITPG08

ITPG09

ITPG10

application.

IT-PRG 1

IT-PRG 2

IT-PRG

IT-PRG 4

IT-PRG

05

IT-PRG

IT-PRG 7

IT-PRG 8

IT-PRG 9

Programming & Software Develoment Focus Area

Instructions: 1) Enter the Program of Study name above. 2) Enter your high school name. 3) Enter the community college name. 4) Enter the date. 5) Click on the cell for Course 1 Name, Course 2 Name, etc., and replace with your POS course names--secondary and first year of post-secondary. 6) Enter school course numbers. 7) Enter NCES code for the course (secondary only). 8) Enter number of credits awarded. 9) Identify those courses that trigger the TSA for this POS. 10) Finally, check those standards that are taught with intent and purpose, and are assessed in each course. Note: The optional Focus Area tabs below are included for those POSs that have a very specific industry fociusare using those skill sets for multiple options in a Progam of Study or if you want to use another set of industry validated standards.

Focus Area Knowledge and Skills (CTE standards)

ITPG01 Analyze customer software needs and requirements.

Design, create and maintain a database.

KS Statement

Demonstrate the use of industry standard strategies and project planning to meet

Analyze system and software requirements to ensure maximum operating efficiency.

Demonstrate the effective use of software development tools to develop software

Program a computer application using the appropriate programming language.

Perform quality assurance tasks as part of the software development cycle.

Apply an appropriate software development process to design a software

Demonstrate software testing procedures to ensure quality products.

Perform software maintenance and customer support functions.

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Computer	, ardin web Design	Web Design 2	Game Design 1 Intro	Game Design 2	Java Programning 1	Java Progamning 2	Robotics 1	Robolics 2			
A423X	A431X	A432X	A445X	A446X	A459X	A463X	A562X	A563X			
10251	10201	10201	10160	10160	10155	10155	21009	21009			
0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5			
N	N	N	N	N	N	Y	N	N			
		Х			Х	Х					
		х			x	х					
		X			x	x					
	X	Х	Х	X	x	Х	X	x			
		Х		X	x	Х	X	x			
	Х	Х	Х	Х	Х	Х	Х	X			
		Х	Χ	X	Х	X	Х	Х			
					Х	Х					
						lx		ĺ			

Skills-to-Course Matrix

Information Technology

Southridge High School Portland Community College Mar-19

CCTC*

IT-WD 1

IT-WD 2

IT-WD 3

IT - WD 4

IT - WD 5

IT-WD 6

IT-WD 7

IT-WD 8

IT-WD 9

IT-WD 10

Web & Digital Communications Focus Area

<u>Instructions</u>: 1) Enter the Program of Study name above. 2) Enter your high school name. 3) Enter the community college name. 4) Enter the date. 5) Click on the cell for Course 1 Name, Cou secondary and first y NCES code for the co Identify those cours standards that are t Note: The optional specific industry foc Study or if you want

ry ho s t e o	and first year of e for the cours se courses that that are taught optional Focus lustry fociusare	Name, etc., and replace with your POS course names of post-secondary. 6) Enter school course numbers. 7) Enter e (secondary only). 8) Enter number of credits awarded. 9) at trigger the TSA for this POS. 10) Finally, check those with intent and purpose, and are assessed in each course. Area tabs below are included for those POSs that have a very e using those skill sets for multiple options in a Progam of e another set of industry validated standards.	Compiter	neb Desi	gn' web Design 2	Game Design (Intro)	Game Design?	Java Programming 1	Java Progamming 2	Robotics 1	Robotics 2	(Course 10 Marie)
			A423X	A431X	A432X	A445X	A446X	A459X	A463X	A562X	A563X	[Course Number]
			10251	10201	10201	10160	10160	10155	10155	21009	21009	[NCES Code]
	Focus Are	a Knowledge and Skills (CTE standards)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	[# of Credits]
	Code Number	KS Statement	N	N	N	N	N	N	Υ	N	N	[TSAY or N?]
	ICXHi01	Analyze customer requirements to design and develop a Web or digital communication product.		X	x							
2	ICXHi02	Apply the design and development process to produce user-focused Web and digital communications solutions.		Х	х							
3	ICXHi03	Write product specifications that define the scope of work aligned to customer requirements.			х							
4	ICXH04	Demonstrate the effective use of tools for digital communication production, development and project management.		x	x							
5	ICXHi05	Develop, administer and maintain Web applications.			Х							
3	ICXHi06	Design, create and publish a digital communication product based on customer needs		X	х							
7	ICXHi07	Evaluate the functionality of a digital communication product using industry accepted techniques and metrics.		X	х							
3	ICXHi08	Implement quality assurance processes to deliver quality digital communication products and services										
)	ICXHi09	Perform maintenance and customer support functions for digital communication products.										
0	ICXHi10	Comply with intellectual property laws, copyright laws and ethical practices when creating Web/digital communications.		X	x							