



Technical / Career Education

Workers of today may change occupations five to seven times in their lifetimes. In order to better prepare students for this trend, technical and career education courses are now organized into career clusters. Courses within the cluster areas provide for career exploration, pursuit of career interests, preparation for the changing demands of life roles, study of the principles and practical experiences of technology and science, and application of academic learning in the world of work.

Students seeking employment after graduation from high school, as well as students seeking employment after the completion of college, may choose from a wide variety of technical and career courses.

Some programs that might be included are:

Technical Education:

- Construction / Manufacturing
- Power & Transportation
- Computers & Communications
- Technical Drawing
- Photography / Graphics
- Project Lead the Way

Business/Marketing:

- Accounting / Adv.
- Computer Systems / Adv.
- Information Technology Fundamentals
- Virtual Enterprise
- Keyboarding / Key Applications / Desktop
- Business Law
- Office Administration
- Cooperative Office Education

The pages that follow contain a list of spaces and drawings illustrating the relationship between various program areas, and the individual spaces within the program area. Additionally, a description of the activities, persons to accommodate, and items to be considered is included.



Technical / Career Education Space Requirements

The table below lists the square footage allocated specifically for the Technical and Career Education classes.

Plan A: Centralized Career / Tech Ed

Technical / Career Education	Suggested			
	TS	Quantity	SF	Total
Video Production	1	1	1,400	1,400
Computer Lab	1	1	850	850
Media Lab (Yearbook / Newspaper)	1	1	1,400	1,400
Staff Office / Storage		1	850	850
CADD / Web Design	1	1	1,200	1,200
Business / Marketing	3	3	1,000	3,000
Project Lead the Way	1	1	2,000	2,000
Manufacturing	1	1	3,000	3,000
Agriculture	1	1	3,000	3,000
Graphic Arts	1	1	1,500	1,500
Career Tech Ed Program TBD	1	1	2,400	2,400
Total	12			20,600

Note: Some of these areas may be incorporated into the Core Academic Areas See Plan B

Plan B: Integrate Tech Ed Areas into Core Academic Areas

Technical / Career Education	Suggested			
	TS	Quantity	SF	Total
Manufacturing	1	1	3,000	3,000
Agriculture	1	1	3,000	3,000
Total	2			6,000



Technical / Career Education Space Descriptions
Video Production

VIDEO PRODUCTION	
ACTIVITIES	PERSONS
Video Production	Teachers
	Students

VIDEO PRODUCTION		QTY
MECHANICAL	Sound proof room	Yes
PLUMBING	No Special Requirements	
ELECTRICAL / LIGHTING	Adjustable lighting	Yes
TECHNOLOGY	See regular classroom Video & audio recording devices	Yes Yes
FURNITURE / EQUIPMENT	See regular classroom	Yes
DOORS & WINDOWS	Door with view panel No windows	Yes Yes
SPECIAL CONSIDERATIONS	Set up for newscasting	Yes



Program Area Descriptions
High School Educational Specifications

Technical / Career Education Space Descriptions
Computer Lab

COMPUTER LAB		
ACTIVITIES	PERSONS	
Whole group and small group language instruction	Students	
	Teachers	

COMPUTER LAB		QTY
MECHANICAL	Adequate ventilation	Yes
	Air conditioning	Yes
PLUMBING	No special requirements	
ELECTRICAL / LIGHTING	Multiple duplex electrical outlets on each wall to data ports	Yes
	Dedicated lines and electrical for computers	Yes
	Dimmer light switches	Yes
	Room darkening capability	Yes
	Telephone/Intercom/voicemail port	Yes
TECHNOLOGY	Video and data ports	Yes
	Quad outlet adjacent to each data port	Yes
	Data drops with double, triple, or quad Communications Network Outlets	35
	Wireless access points throughout school	Yes
	Electronic surveillance system in every area	Yes
	Headphones and microphones	Yes
	Interactive whiteboards connected to the Audio/Visual storage plates on the wall and floor, with proximity to electrical and data ports	Yes

Technical / Career Education Space Descriptions
Computer Lab

COMPUTER LAB		QTY
FURNITURE / EQUIPMENT	Printers and printer tables	Yes
	Wall cabinets	Yes
	Worktables	Yes
	Comfortable ergonomic student chairs that allow movement	Yes
	Marker board	Yes
	Tack board	Yes
	Computer tables and chairs	Yes
	Shelving for printer supplies/paper	Yes
	Locking storage cabinets with multiple power outlets	Yes
DOORS & WINDOWS	Door: no special requirements	
	Windows: operable, with blinds to allow controlled natural lighting	Yes
SPECIAL CONSIDERATIONS	Provide method to darken room for Audio/Visual presentations	Yes
	Security consideration for community after-school use	Yes
	Teacher presentation station	Yes
	Moveable furniture	Yes



Technical / Career Education Space Descriptions

Media Lab

MEDIA LAB	
ACTIVITIES	PERSONS
Productions	Students
Computer applications	Teacher
Yearbook	Aides
Newspaper	Parents
	Community Members

MEDIA LAB		QTY
MECHANICAL	No Special Requirements	
PLUMBING	No Special Requirements	
ELECTRICAL / LIGHTING	Duplex electrical outlets on each wall	Yes
	Quad outlet @ each data port	Yes
	Ability to control specific lighting areas	Yes
	Room darkening capability	Yes
TECHNOLOGY	Telephone / intercom / voicemail port	Yes
	Multi media projection	Yes
	Projector from Ceiling	Yes
	Whiteboard / Projector Screen	Yes
	Front row of light, dimmable	Yes
	Data ports	Yes
	6 data drops with double, triple, or quad Communications Network Outlets	Yes
	Wireless laptops with carts for battery recharging	Yes
	Area for distance learning (with video conferencing)	Yes
	Headphones and microphones	Yes



Technical / Career Education Space Descriptions
Media Lab

MEDIA LAB		QTY
FURNITURE / EQUIPMENT	Movable tables and chairs	Yes
	Printers and printer tables	Yes
	Networked computers with access to programs and card catalog	Yes
	LCD projector and mounted screen	Yes
	Tack board	Yes
	Magnetic marker board	Yes
DOORS & WINDOWS	Anti-static carpets	Yes
	Door with view panel	Yes
SPECIAL CONSIDERATIONS	Windows: operable, allow controlled natural lighting	Yes
	Natural light	Yes
	Auditory privacy	Yes
	Provide method to darken room for AV Presentations	Yes
	Accessible computer equipment for special needs	Yes



Technical / Career Education Space Descriptions

Project Lead the Way

PROJECT LEAD THE WAY	
ACTIVITIES	PERSONS
Pre engineering	Teachers
Tech production	Students
Group work	

PROJECT LEAD THE WAY		QTY
MECHANICAL	No Special Requirements	
PLUMBING	No Special Requirements	
ELECTRICAL / LIGHTING	Duplex outlet	1 per wall
	Quad outlet @ each data port	1
	Overhead lighting	Yes
	Room darkening capability - dimmer switches	Yes
	Controlled day lighting, banked lighting	Yes
	Mobile tables need variety of ways to set electricity [floor or fixed table]	Yes
	Front row of light, dimmable	Yes
TECHNOLOGY	Wall mounted projection screen	Yes
	Voice, data, video outlets at teacher desk	1
	6 data drops with double, triple, or quad Communications Network Outlets	6
	2 data drops at teacher desk area	2
	Single data drop dedicated to wireless, high on wall	1
	Telephone	1
	Intercom	Yes
	Interactive whiteboard with integral computer projector	1
	Ceiling mounted computer projector with retractable screen	Yes
	Laptop computers with carts, shared	26
	Access to voice, video, data ports, and electrical outlets	Yes
	Teacher data port separate from student data ports	Yes
	Audio enhancement	1 system

Technical / Career Education Space Descriptions

Manufacturing

MANUFACTURING	
ACTIVITIES	PERSONS
Classroom presentation	Teacher
Project design	Aides
Project construction	Parents
Demo project exemplar	Students
Construction	
Fabrication	
Production	
Manufacturing	
Project work	

MANUFACTURING		QTY
MECHANICAL	Dust Collection	Yes
	Fume hood	Yes
	Compressed air	Yes
	Adequate ventilation	Yes
PLUMBING	Sinks with hot and cold water	Yes
ELECTRICAL / LIGHTING	Duplex electrical outlets on each wall	Yes
	Quad outlet @ each data port	Yes
	Ability to control specific lighting areas	Yes
	Room darkening capability	Yes
TECHNOLOGY	Telephone / intercom / voicemail port	Yes
	Multi media projection	Yes
	Digital camera	Yes
	Projector from Ceiling	Yes
	Whiteboard / Projector Screen	Yes
	Front row of light, dimmable	Yes
	Data ports	Yes
	Quad outlet adjacent to each data port	Yes
	6 data drops with double, triple, or quad Communications Network Outlets	Yes
	Wireless laptops with carts for battery recharging	Yes
	Area for distance learning (with video conferencing)	Yes
	Headphones and microphones	Yes



Technical / Career Education Space Descriptions

Agriculture

AGRICULTURE	
ACTIVITIES	PERSONS
Agriculture mechanics	Teachers
	Students

AGRICULTURE		QTY
MECHANICAL	No Special Requirements	
PLUMBING	No Special Requirements	
ELECTRICAL / LIGHTING	Duplex outlet	1 per wall
	Quad outlet @ each data port	1
	Overhead lighting	Yes
	Room darkening capability - dimmer switches	Yes
	Controlled day lighting, banked lighting	Yes
	Mobile tables need variety of ways to set electricity [floor or fixed table]	Yes
	Front row of light, dimmable	Yes
TECHNOLOGY	Wall mounted projection screen	Yes
	Voice, data, video outlets at teacher desk	1
	6 data drops with double, triple, or quad Communications Network Outlets	6
	2 data drops at teacher desk area	2
	Single data drop dedicated to wireless, high on wall	1
	Telephone	1
	Intercom	Yes
	Interactive whiteboard with integral computer projector	1
	Ceiling mounted computer projector with retractable screen	Yes
	Laptop computers with carts, shared	26
	Access to voice, video, data ports, and electrical outlets	Yes
	Teacher data port separate from student data ports	Yes
	Audio enhancement	1 system



Technical / Career Education Space Descriptions
Agriculture

AGRICULTURE		QTY
FURNITURE / EQUIPMENT	Computer tables	Yes
	Teacher desk and chair	Yes
	Ergonomic chairs	Yes
	Interactive whiteboard	Yes
	Black and white printer	Yes
	Color printer	Yes
	Scanner	Yes
	Ceiling mounted projector screen	Yes
DOORS & WINDOWS		
Door with view panel		Yes
Windows with built in blinds		Yes
SPECIAL CONSIDERATIONS		
No special requirements		



Technical / Career Education Space Descriptions
Graphic Arts

GRAPHIC ARTS	
ACTIVITIES	PERSONS
Project work	Teachers
Research	Students
Computer access	Volunteers
Group work	

GRAPHIC ARTS		QTY
MECHANICAL	No Special Requirements	
PLUMBING	No Special Requirements	
ELECTRICAL / LIGHTING	Duplex outlet	1 per wall
	Quad outlet @ each data port	1
	Overhead lighting	Yes
	Room darkening capability - dimmer switches	Yes
	Controlled day lighting, banked lighting	Yes
	Mobile tables need variety of ways to set electricity [floor or fixed table]	Yes
	Front row of light, dimmable	Yes
	Wall mounted projection screen	Yes
	Voice, data, video outlets at teacher desk	1
	6 data drops with double, triple, or quad Communications Network Outlets	6
TECHNOLOGY	2 data drops at teacher desk area	2
	Single data drop dedicated to wireless, high on wall	1
	Telephone	1
	Intercom	Yes
	Interactive whiteboard with integral computer projector	1
	Ceiling mounted computer projector with retractable screen	Yes
	Laptop computers with carts, shared	26
	Access to voice, video, data ports, and electrical outlets	Yes
	Teacher data port separate from student data ports	Yes
	Audio enhancement	1 system



Technical / Career Education Space Descriptions
Graphic Arts

GRAPHIC ARTS		QTY
FURNITURE / EQUIPMENT	Computer tables	Yes
	Teacher desk and chair	Yes
	Ergonomic chairs	Yes
	Interactive whiteboard	Yes
	Black and white printer	Yes
	Color printer	Yes
	Scanner	Yes
DOORS & WINDOWS	Ceiling mounted projector screen	Yes
	Door with view panel	Yes
SPECIAL CONSIDERATIONS	Windows with built in blinds	Yes
	No special requirements	

Program Area Descriptions
High School Educational Specifications

Technical / Career Education Space Descriptions
Staff Office / Storage

STAFF OFFICES / STORAGE		PERSONS
ACTIVITIES		Teachers
Teacher meetings and preparation		
STAFF OFFICES / STORAGE		QTY
MECHANICAL	Quiet air conditioning	Yes
PLUMBING	No special requirements	
ELECTRICAL / LIGHTING	Duplex electrical outlets on each wall	Yes
	Quad outlet at each data port	Yes
TECHNOLOGY	Telephone/intercom/Voicemail port	Yes
	Video and data ports	Yes
	Duplex outlet	Yes
	Quad outlet @ each data port	Yes
FURNITURE / EQUIPMENT	Intercom	Yes
	Flexible surfaces	Yes
	Legal size file lateral drawer	Yes
	6 data drops with double, triple, or quad Communications Network Outlets	1
	Desk chair	1
	Guest chairs	2
	Lamps	Yes
	Bookshelves	18LF
	Marker board	4LF
	Laptop computer	1
	Printer	1
	Locking file cabinet, 4 drawer	1 to 2
DOORS & WINDOWS	Bulletin board	4LF
	Clock	1
SPECIAL CONSIDERATIONS	Door: view panel	Yes
	Bright, soft lighting	Yes
	Carpeted flooring	Yes
		Yes



Technical / Career Education Space Descriptions
CADD / Web Design

CADD WEB DESIGN	
ACTIVITIES	PERSONS
Project work	Teachers
Research	Students
Computer access	Volunteers
Group work	

CADD WEB DESIGN		QTY
MECHANICAL	No Special Requirements	
PLUMBING	No Special Requirements	
ELECTRICAL / LIGHTING	Duplex outlet	1 per wall
	Quad outlet @ each data port	1
	Overhead lighting	Yes
	Room darkening capability - dimmer switches	Yes
	Controlled day lighting, banked lighting	Yes
	Mobile tables need variety of ways to set electricity [floor or fixed table]	Yes
	Front row of light, dimmable	Yes
TECHNOLOGY	Wall mounted projection screen	Yes
	Voice, data, video outlets at teacher desk	1
	6 data drops with double, triple, or quad Communications Network Outlets	6
	2 data drops at teacher desk area	2
	Single data drop dedicated to wireless, high on wall	1
	Telephone	1
	Intercom	Yes
	Interactive whiteboard with integral computer projector	1
	Ceiling mounted computer projector with retractable screen	Yes
	Laptop computers with carts, shared	26
	Access to voice, video, data ports, and electrical outlets	Yes
	Teacher data port separate from student data ports	Yes
	Audio enhancement	1 system

Technical / Career Education Space Descriptions
CADD / Web Design

CADD WEB DESIGN		QTY
FURNITURE / EQUIPMENT	Computer tables	Yes
	Teacher desk and chair	Yes
	Ergonomic chairs	Yes
	Interactive whiteboard	Yes
	Black and white printer	Yes
	Color printer	Yes
	Scanner	Yes
	Ceiling mounted projector screen	Yes
DOORS & WINDOWS	Door with view panel	Yes
	Windows with built in blinds	Yes
SPECIAL CONSIDERATIONS	No special requirements	

Technical / Career Education Space Descriptions

Business & Marketing

BUSINESS & MARKETING	
ACTIVITIES	PERSONS
Whole group and small group instruction	Students
Computer learning	Teacher
	Aides
	Parents
	Community Members

BUSINESS & MARKETING		QTY
MECHANICAL	No Special Requirements	
PLUMBING	No Special Requirements	
ELECTRICAL / LIGHTING	Duplex electrical outlets on each wall	Yes
	Quad outlet @ each data port	Yes
	Ability to control specific lighting areas	Yes
	Room darkening capability	Yes
	Telephone / Intercom / voicemail port	Yes
TECHNOLOGY	Multi media projection	Yes
	Projector from Ceiling	Yes
	Whiteboard / Projector Screen	Yes
	Front row of light, dimmable	Yes
	Data ports	Yes
	6 data drops with double, triple, or quad Communications Network Outlets	Yes
	Wireless laptops with carts for battery recharging	Yes
	Area for distance learning (with video conferencing)	Yes
	Headphones and microphones	Yes

Technical / Career Education Space Descriptions
Business & Marketing

BUSINESS & MARKETING		QTY
FURNITURE / EQUIPMENT	Movable tables and chairs	Yes
	Printers and printer tables	Yes
	Networked computers with access to programs and card catalog	Yes
	LCD projector and mounted screen	Yes
	Tack board	Yes
	Magnetic marker board	Yes
	Anti-static carpets	Yes
DOORS & WINDOWS	Door with view panel	Yes
	Windows: operable, allow controlled natural lighting	Yes
SPECIAL CONSIDERATIONS	Natural light	Yes
	Auditory privacy	Yes
	Provide method to darken room for AV Presentations	Yes
	Accessible computer equipment for special needs	Yes