Name:	Grading Quarter:	Week Beginning:
Robert Lefrandt	1	09/16/2024
School Year: 2024-25	Subject: Fab Lab/Engi	neering

Monday	Notes: Robotic Assemblies Mechtronic Engineer:	Fab Lab/Engineering Objective: The Fab Lab/Engineering instructional program prepares students to	Academic Standards: Arizona Department of
	ReEngineer Reverse Engineering Structural Chassis frame body Mechanical (Motion) Gear: Box, train, parallel (linear) stack (vertical),	 apply basic engineering principles and technical skills in support of engineers engaged in a wide variety of projects. Lesson Overview: Students learn to apply Science Technology Engineering Math (STEM) concepts to current technologies and tools as they learn about the different disciplines and opportunities within the fields of engineering. Blueprint for Instruction and Assessment Engineering Math and Science Principles, Tools, Project Management, Address Needs in Global Society 	Education Website: Program Description/ Industry Credentials/ Coherent Sequence/ https://www .azed.gov/cte /es/
	ratio, torque speed Mechtronic Electrical (Ohm's Law, Parallel/Seri al Circuits) Chemical e-chem Physical Magnetism Batteries Software Block PLC ladder		
	logic, CNC, Python, C++ Sensors touch, Dist Light, Camera		

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Tuesday	<u>Notes:</u> Debetic	Fab Lab/Engineering	Academic
bsd	Robotic	Objective	Standards:
ау	Assemblies	Objective:	Arizono
	Mechtronic	The Fab Lab/Engineering instructional program prepares students to	Arizona
	Engineer:	apply basic engineering principles and technical skills in support of	Department
	ReEngineer	engineers engaged in a wide variety of projects.	of
	Reverse	Lesson Overview:	Education
	Engineering		Website:
	Structural	Students learn to apply Science Technology Engineering Math (STEM)	
	Chassis	concepts to current technologies and tools as they learn about the	Program
	frame body	different disciplines and opportunities within the fields of engineering.	Description/
	Mechanical		Industry
	(Motion)	Blueprint for Instruction and Assessment	Credentials/
	Gear: Box,	-	Coherent
	train,	Engineering Math and Science Principles, Tools, Project Management,	Sequence/
	parallel	Address Needs in Global Society	
	-		https://www
	(linear)	*Competitions Prep	.azed.gov/cte
	stack		/es/
	(vertical),		
	ratio,		Notes Conti:
	torque		PhysComp
	speed		Embedded
			smart, IIOT
	Mechtronic		Al ,Data
	Electrical (Collect Data
	Ohm's Law,		
	Parallel/Seri		Analyze Data
	-		MachinLearn
	al Circuits)		Collaborate
	Chemical		schools,
	e-chem		Inductor
	Physical		Industry
	Magnetism		Community
	Batteries		
	Software		
	Block		
	PLC ladder		
	logic, CNC,		
	Python, C++		
	Sensors		
	touch, Dist		
	Light,		
	Camera		

5	Notes:	Fab Lab/Engineering	Academic
Wednesday	Robotic		Standards:
nes	Assemblies	Objective:	
day	Mechtronic	The Fab Lab/Engineering instructional program prepares students to	Arizona
~	Engineer:	apply basic engineering principles and technical skills in support of	Department
	ReEngineer	engineers engaged in a wide variety of projects.	of
	Reverse	Lesson Overview:	Education
	Engineering	Students learn to apply Science Technology Engineering Math (STEM)	Website:
	Structural	concepts to current technologies and tools as they learn about the	Program
	Chassis	different disciplines and opportunities within the fields of engineering.	Description/
	frame body Mechanical	different disciplines and opportunities within the fields of engineering.	Industry
	(Motion)		Credentials/
	Gear: Box,	Blueprint for Instruction and Assessment	Coherent
	train,	Engineering Math and Science Principles, Tools, Project Management,	Sequence/
	parallel	Address Needs in Global Society	
	(linear)		https://www
	stack	*Competitions Prep	.azed.gov/cte
	(vertical),		/es/
	ratio,		<u>Notes Conti:</u>
	torque		PhysComp
	speed		Embedded
	-		smart, IIOT
	Mechtronic		Al ,Data
	Electrical (Collect Data
	Ohm's Law,		Analyze Data
	Parallel/Seri		, MachinLearn
	al Circuits)		Collaborate
	Chemical		schools,
	e-chem		
	Physical		Industry
	Magnetism		Community
	Batteries		
	Software		
	Block		
	PLC ladder		
	logic, CNC,		
	Python, C++		
	Sensors		
	touch, Dist		
	Light,		
	Camera		
	Cumera		

Ţ	Notes:	Fab Lab/Engineering	Academic
Thursday			Standards:
day	Engineer:	Objective:	• •
	ReEngineer	The Fab Lab/Engineering instructional program prepares students to	Arizona
	Reverse	apply basic engineering principles and technical skills in support of	Department
	Engineering Structural	engineers engaged in a wide variety of projects.	of
	Chassis	Lesson Overview:	Education Website:
	frame body	Students learn to apply Science Technology Engineering Math (STEM)	website.
	, Mechanical	concepts to current technologies and tools as they learn about the	Program
	(Motion)	different disciplines and opportunities within the fields of engineering.	Description/
	Gear: Box,	different disciplines and opportunities within the fields of engineering.	Industry
	train,		Credentials/
	parallel	Blueprint for Instruction and Assessment	Coherent
	(linear)	Engineering Math and Science Principles, Tools, Project Management,	Sequence/
	stack	Address Needs in Global Society	
	(vertical),		https://www
	ratio,	*Competitions Prep	<u>.azed.gov/cte</u>
	torque		<u>/es/</u>
	speed		
			https://www
	Mechtronic		.azed.gov/cte /es/
	Electrical (/ 63/
	Ohm's Law,		Notes Conti:
	Parallel/Seri		PhysComp
	al Circuits)		Embedded
	Chemical		smart, IIOT
	e-chem		AI ,Data
	Physical		Collect Data
	Magnetism		Analyze Data
	Batteries		MachinLearn
	Software		Collaborate
			schools,
	Block		
	PLC ladder		Industry
	logic, CNC,		Community
	Python, C++		
	Sensors		
	touch, Dist		
	Light,		
	Camera		
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<u>_</u> .	Notes:	Fab Lab/Engineering	Academic
Friday			Standards:
~	Engineer:	Objective:	
	ReEngineer	The Fab Lab/Engineering instructional program prepares students to	Arizona
	Reverse	apply basic engineering principles and technical skills in support of	Department
	Engineering Structural	engineers engaged in a wide variety of projects.	of
	Chassis	Lesson Overview:	Education Website:
	frame body	Students learn to apply Science Technology Engineering Math (STEM)	website.
	Mechanical	concepts to current technologies and tools as they learn about the	Program
	(Motion)	different disciplines and opportunities within the fields of engineering.	Description/
	Gear: Box,		Industry
	train,	Diversity for Instruction and Association	Credentials/
	parallel	Blueprint for Instruction and Assessment	Coherent
	(linear)	Engineering Math and Science Principles, Tools, Project Management,	Sequence/
	stack	Address Needs in Global Society	
	(vertical),		https://www
	ratio,	*Competitions Prep	.azed.gov/cte
	torque		/es/
	speed		
	Mechtronic		<u>Notes Conti:</u>
	Electrical (PhysComp
	•		Embedded
	Ohm's Law, Parallel/Seri		smart, IIOT
	-		Al ,Data
	al Circuits) Chemical		Collect Data
			Analyze Data
	e-chem		MachinLearn
	Physical Magnotism		Collaborate
	Magnetism Batteries		schools,
	Software		Industry
	SULWALE		Community
	Block		
	PLC ladder		
	logic, CNC,		
	Python, C++		
	Sensors		
	touch, Dist		
	Light,		
	Camera		