Name:	Grading Quarter:	Week Beginning:
Robert Lefrandt	1	09/02/2024
School Year: 2024-25	Subject: Fab Lab/Engi	ineering

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Notes:
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Fab Lab/Engineering

Objective:

The Fab Lab/Engineering instructional program prepares students to 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

Academic Standards:

Arizona Department of Education Website:

Program Description/ Industry Credentials/ Coherent Sequence/

https://www .azed.gov/cte /es/

Ţ	Notes:	Fab Lab/Engineering	Academic
les	Robotic		Standards:
Tuesday	Assemblies	Objective:	
	Mechtronic	The Fab Lab/Engineering instructional program prepares students to	Arizona
		apply basic engineering principles and technical skills in support of	Department
	Engineer:	engineers engaged in a wide variety of projects.	of
	ReEngineer		Education
	Reverse	Lesson Overview:	Website:
	Engineering 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
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	Gear: Box,	Blueprint for Instruction and Assessment	Coherent
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	Physical		Industry
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	logic, CNC,		
	Python, C++		
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	W	Notes:	Fab Lab/Engineering
	Wednesday	Robotic	
	ıesc	Assemblies	Objective:
	lay	Mechtronic	The Fab Lab/Engineering instructional program prepares students to
		Engineer:	apply basic engineering principles and technical skills in support of
		ReEngineer	engineers engaged in a wide variety of projects.
		Reverse	Lesson Overview:
		Engineering	Students learn to apply Science Technology Engineering Math (STEM)
		Structural	concepts to current technologies and tools as they learn about the
		Chassis	different disciplines and opportunities within the fields of engineering.
		frame body Mechanical	amerent disciplines and opportunities within the helds of engineering.
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		logic, CNC,	
		Python, C++	
		Sensors	
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		Light,	
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Academic Standards:

Arizona
Department
of
Education
Website:

Program
Description/
Industry
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https://www .azed.gov/cte /es/

Notes Conti:
PhysComp
Embedded
smart, IIOT
AI ,Data
Collect Data
Analyze Data
MachinLearn
Collaborate
schools,

Industry Community

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Ţ	Notes:	Fab Lab/Engineering	Academic
Thursday	Engineer	Objectives	Standards:
зау	Engineer: ReEngineer	Objective: The Fab Lab/Engineering instructional program prepares students to	Arizona
	Reverse	apply basic engineering principles and technical skills in support of	Department
	Engineering	engineers engaged in a wide variety of projects.	of
	Structural		Education
	Chassis	Lesson Overview:	Website:
	frame body	Students learn to apply Science Technology Engineering Math (STEM)	
	Mechanical (Motion)	concepts to current technologies and tools as they learn about the	Program
	Gear: Box,	different disciplines and opportunities within the fields of engineering.	Description/
	train,		Industry Credentials/
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	Batteries Software		Collaborate
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	PLC ladder		Industry
	logic, CNC,		Community
	Python, C++		
	Sensors		
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	Light,		
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Friday	Notes:	Fab Lab/Engineering	Academic
day	Engineer	Objective:	Standards:
	Engineer: ReEngineer	The Fab Lab/Engineering instructional program prepares students to	Arizona
	Reverse	apply basic engineering principles and technical skills in support of	Department
	Engineering	engineers engaged in a wide variety of projects.	of
	Structural		Education
	Chassis	Lesson Overview:	Website:
	frame body	Students learn to apply Science Technology Engineering Math (STEM)	
	Mechanical	concepts to current technologies and tools as they learn about the	Program
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	train,		Industry
	parallel	Blueprint for Instruction and Assessment	Credentials/
	(linear)	Engineering Math and Science Principles, Tools, Project Management,	Coherent
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	Mechtronic		Notes Conti:
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	al Circuits)		Collect Data
	Chemical		Analyze Data
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	Magnetism		schools,
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	Software		Industry
	Block		Community
	PLC ladder		
	logic, CNC,		
	Python, C++		
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	Light,		
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