



# Science and Technology

## Curriculum Unit Overview

### Robotic Solutions

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[Unit 2 - Researching, Responding, and Presenting Information from Non-Fiction Articles](#)

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#### Unit 1 The Design Process

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**Course Title:** Robotic Solutions

**Course Author:** Gregory Walzer

**Grade Level(s):** 9-12

**Time/Duration:** Semester

**Course Summary:** (optional) Students who participate in **Robotic Solutions** will discover the future of robotics related technologies. Students will be presented with one (1) build challenge per quarter. Students will research, design, build, and test prototypes using the Scientific Method and Design Thinking Process. A record of their work will be documented in an Engineering Notebook. They will present working prototypes to Trac Fabrication Inc. for feedback and evaluation. In the end, students who elect to take **Robotic Solutions** will be a part of the growing trend to integrate robotics into our daily lives.

<b>Unit Name:</b> The Design Process	<b>Unit Number:</b> 1	<b>Created:</b> Fall 2021	<b>Revised:</b> TBD
<b>Standards Addressed:</b> <ul style="list-style-type: none"> <li>• 3.1. Unifying Themes</li> <li>• 3.2. Inquiry and Design</li> <li>• 3.6. Technology Education</li> <li>• 3.7. Technological Devices</li> <li>• 3.8. Science, Technology and Human Endeavors</li> <li>• 1.2 Reading Informational Text</li> <li>• 1.4 Writing</li> <li>• 1.5 Speaking and Listening</li> </ul>			

## Stage 1 Desired Results: Enduring Understandings & Essential Questions

*What are the overarching takeaways and big ideas for students?*

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### Big Ideas:

The Design Process is an approach for breaking down a large project into manageable parts. Roboticists use the Design Process to solve a variety of problems.

### Transfer

*Students will be able to independently use their learning to...*

1. Students will be able to identify a problem
2. Students will be able to separate the problem into its parts
3. Students will be able to solve each part of the problem
4. Students will be able to solve the overall problem by solving the individual parts.

### Meaning

### UNDERSTANDINGS

*Students will understand that...*

1. The Design Process has five (5) parts.
2. Part 1 - Empathize
3. Part 2 - Define
4. Part 3 - Ideate
5. Part 4 - Prototype
6. Part 5 - Test

#### **ESSENTIAL QUESTIONS**

1. Why do engineers and designers strive to improve products used in our daily lives?
2. Why do we use the Design Process to solve design challenges?
3. How can the design process benefit us in solving problems in our daily lives?
4. How does the Design Process relate to problem solving and critical thinking?
5. What role does creativity have in engineering design?
6. Why follow a process?
7. What makes a solution the “best”?

### **Stage 1: Essential Content, Concepts & Skills**

*What do we want students to know and be able to do?*

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#### **Acquisition**

#### **KNOWLEDGE**

**Students will know...**

1. Students will know that a problem can be solved more effectively and efficiently by utilizing the Design Process.
2. Students will know that the Design Process is not necessarily a linear process. Failures and problems will force returning to the “Ideate” stage and making adjustments.

## SKILLS

### Students will be skilled at (be able to do)...

1. Students will no longer view problems and try to solve them as a whole.
2. Students will be skilled at identifying a problem, defining the problem, empathizing, breaking the problem into manageable parts, solve each part, prototype a solution considering all variables, and testing the solution for viability.
3. Students will be skilled at identifying problems with the solution and be able to rectify the problem(s).

## Stage 2: Assessments/Evidence of Learning

*What are the formative (informal) and summative (formal) assessments used to measure learning and growth?*

*How will you know that they did it?*

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Evaluative Criteria	Assessment Evidence
<ol style="list-style-type: none"> <li>1. Conferencing</li> <li>2. Daily / Weekly Progress Check In / Check Out</li> <li>3. Research and Presentations</li> <li>4. Summary of Research</li> <li>5. Identification of Big Ideas</li> <li>6. Application of Research</li> </ol>	<p>PERFORMANCE TASK(S)/Think GRASPS:</p> <ol style="list-style-type: none"> <li>1. Design Brief (Problem Statement, Design Statement, Constraints, Deliverables)</li> <li>2. Deliverables (Completed Robot, Programming, Demonstration)</li> <li>3. Research as a Tool for Ideating</li> <li>4. Discussion of Problems and Solutions</li> </ol>
<ol style="list-style-type: none"> <li>1. [Type Here]</li> <li>2. [Type Here]</li> </ol>	<p>OTHER EVIDENCE:</p> <ol style="list-style-type: none"> <li>1. Conferencing</li> <li>2. Daily/Weekly Progress Check In / Check Out</li> <li>3. Questioning Solutions / Progress</li> </ol>

### Stage 3: Learning Plan

*What are the differentiated instructional strategies, activities, lesson plans that support the enduring understandings and essential questions for all students?*

*This section provides a summary of the Key Learning Events and Instruction*

*Teachers may summarize the topics within lessons or may utilize [Laurel UbD Lesson Plan Template](#)*

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#### *Summary of Key Learning Events and Instruction*

1. Students will **empathize** with people faced with a problem.
2. Students will choose a project based on their desire to help those with the problem.
3. Students will **define** the problem.
4. Students will research the problem and possible solutions.
5. Students will present their research to others.
6. Students will utilize the big ideas researched and **ideate** possible solutions.
7. Students will apply the research in a **prototype** or **prototypes**.
8. Students will **test** prototypes.
9. Students will return to the “ideate” step if there are problems with the prototype.
10. Students understand that steps 3-5 will be repeated until the original goal or goals are reached.
11. Students understand that failures are more valuable than successes as more knowledge is gained.

## Unit 2 Researching, Responding, and Presenting Information from Non-Fiction Articles

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Course Title: <b>Robotic Solutions</b>	Course Author: Gregory Walzer	Grade Level(s): <b>9-12</b>	Time/Duration: Semester
<b>Course Summary:</b> (optional) Students who participate in <b>Robotic Solutions</b> will discover the future of robotics related technologies. Students will be presented with one (1) build challenge per quarter. Students will research, design, build, and test prototypes using the Scientific Method and Design Thinking Process. A record of their work will be documented in an Engineering Notebook. They will present working prototypes to Trac Fabrication Inc. for feedback and evaluation. In the end, students who elect to take <b>Robotic Solutions</b> will be a part of the growing trend to integrate robotics into our daily lives.			
Unit Name: <b>Researching, Responding, and Presenting Information from Non-Fiction Articles</b>	Unit Number: <b>2</b>	Created: <b>Fall 2021-Spring 2022</b>	Revised: TBD
<b>Standards Addressed:</b> <ul style="list-style-type: none"><li>• 1.2 Reading Informational Text</li><li>• 1.4 Writing</li><li>• 1.5 Speaking and Listening</li></ul>			

### Stage 1 Desired Results: Enduring Understandings & Essential Questions

*What are the overarching takeaways and big ideas for students?*

[Jump to Table of Contents](#)

#### Big Ideas:

Researching, responding, and presenting information from non-fiction articles can strengthen outcomes in solving problems.

*Transfer*

*Students will be able to independently use their learning to...*

5. [Type Here]

6. [Type Here]

### **Meaning**

#### **UNDERSTANDINGS**

*Students will understand that...*

7. [Type Here]

8. [Type Here]

9. [Type Here]

#### **ESSENTIAL QUESTIONS**

8. How can research strengthen the outcome of a project?

9. How can research be applied to a project?

10.

**Stage 1: Essential Content, Concepts & Skills**  
*What do we want students to know and be able to do?*  
[Jump to Table of Contents](#)

### **Acquisition**

#### **KNOWLEDGE**

**Students will know...**

3. [Type Here]
4. [Type Here]

## SKILLS

Students will be skilled at (be able to do)...

4. [Type Here]
5. [Type Here]

## Stage 2: Assessments/Evidence of Learning

*What are the formative (informal) and summative (formal) assessments used to measure learning and growth?*

*How will you know that they did it?*

[Jump to Table of Contents](#)

Evaluative Criteria	Assessment Evidence
<ol style="list-style-type: none"> <li>7. [Type Here]</li> <li>8. [Type Here]</li> </ol>	PERFORMANCE TASK(S)/Think GRASPS: <ol style="list-style-type: none"> <li>5. [Type Here]</li> <li>6. [Type Here]</li> </ol>
<ol style="list-style-type: none"> <li>3. [Type Here]</li> <li>4. [Type Here]</li> </ol>	OTHER EVIDENCE: <ol style="list-style-type: none"> <li>4. [Type Here]</li> <li>5. [Type Here]</li> </ol>

## Stage 3: Learning Plan

*What are the differentiated instructional strategies, activities, lesson plans that support the enduring understandings and essential questions for all students?*

*This section provides a summary of the Key Learning Events and Instruction*

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[Jump to Table of Contents](#)

*Summary of Key Learning Events and Instruction*

12. [Type Here]

13. [Type Here]

14. [Type Here]

### Unit 3 **Ideating and Prototyping**

[Jump to Table of Contents](#)

<b>Course Title:</b> Robotic Solutions	<b>Course Author:</b> Gregory Walzer	<b>Grade Level(s):</b> 9-12	<b>Time/Duration:</b> Semester
<b>Course Summary:</b> (optional) Students who participate in <b>Robotic Solutions</b> will discover the future of robotics related technologies. Students will be presented with one (1) build challenge per quarter. Students will research, design, build, and test prototypes using the Scientific Method and Design Thinking Process. A record of their work will be documented in an Engineering Notebook. They will present working prototypes to Trac Fabrication Inc. for feedback and evaluation. In the end, students who elect to take <b>Robotic Solutions</b> will be a part of the growing trend to integrate robotics into our daily lives.			
<b>Unit Name:</b> Ideating and Prototyping	<b>Unit Number:</b> 3	<b>Created:</b> Fall 2021-Spring 2022	<b>Revised:</b> TBD
<b>Standards Addressed:</b> <ul style="list-style-type: none"><li>[Type Here]</li></ul>			

## Stage 1 Desired Results: Enduring Understandings & Essential Questions

*What are the overarching takeaways and big ideas for students?*

[Jump to Table of Contents](#)

**Big Ideas:**

[Type Here]

### *Transfer*

*Students will be able to independently use their learning to...*

7. [Type Here]

8. [Type Here]

### *Meaning*

#### **UNDERSTANDINGS**

*Students will understand that...*

10. [Type Here]

11. [Type Here]

12. [Type Here]

#### **ESSENTIAL QUESTIONS**

11. [Type Here]

12. [Type Here]

**Stage 1: Essential Content, Concepts & Skills**  
*What do we want students to know and be able to do?*  
[Jump to Table of Contents](#)

**Acquisition**

**KNOWLEDGE**

Students will know...

5. [\[Type Here\]](#)
6. [\[Type Here\]](#)

**SKILLS**

Students will be skilled at (be able to do)...

6. [\[Type Here\]](#)
7. [\[Type Here\]](#)

**Stage 2: Assessments/Evidence of Learning**  
*What are the formative (informal) and summative (formal) assessments used to measure learning and growth?*  
*How will you know that they did it?*  
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**Evaluative Criteria**

**Assessment Evidence**

9. [\[Type Here\]](#)
10. [\[Type Here\]](#)

PERFORMANCE TASK(S)/Think GRASPS:

7. [\[Type Here\]](#)
8. [\[Type Here\]](#)

5. [\[Type Here\]](#)
6. [\[Type Here\]](#)

OTHER EVIDENCE:

6. [\[Type Here\]](#)
7. [\[Type Here\]](#)

### Stage 3: Learning Plan

*What are the differentiated instructional strategies, activities, lesson plans that support the enduring understandings and essential questions for all students?  
This section provides a summary of the Key Learning Events and Instruction*

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*Summary of Key Learning Events and Instruction*

15. [Type Here]

16. [Type Here]

17. [Type Here]

### Unit 4 **Data Collection and Testing**

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<b>Course Title:</b> Robotic Solutions	<b>Course Author:</b> Gregory Walzer	<b>Grade Level(s):</b> 9-12	<b>Time/Duration:</b> Semester
<b>Course Summary:</b> (optional) Students who participate in <b>Robotic Solutions</b> will discover the future of robotics related technologies. Students will be presented with one (1) build challenge per quarter. Students will research, design, build, and test prototypes using the Scientific Method and Design Thinking Process. A record of their work will be documented in an Engineering Notebook. They will present working prototypes to Trac Fabrication Inc. for feedback and evaluation. In the end, students who elect to take <b>Robotic Solutions</b> will be a part of the growing trend to integrate robotics into our daily lives.			
<b>Unit Name:</b> Data Collection and Testing	<b>Unit Number:</b> 4	<b>Created:</b> Fall 2021-Spring 2022	<b>Revised:</b> TBD
<b>Standards Addressed:</b> <ul style="list-style-type: none"><li>[Type Here]</li></ul>			

## Stage 1 Desired Results: Enduring Understandings & Essential Questions

*What are the overarching takeaways and big ideas for students?*

[Jump to Table of Contents](#)

**Big Ideas:**

[Type Here]

### *Transfer*

*Students will be able to independently use their learning to...*

9. [Type Here]

10. [Type Here]

### *Meaning*

#### **UNDERSTANDINGS**

*Students will understand that...*

13. [Type Here]

14. [Type Here]

15. [Type Here]

#### **ESSENTIAL QUESTIONS**

13. [Type Here]

14. [Type Here]

**Stage 1: Essential Content, Concepts & Skills**  
*What do we want students to know and be able to do?*  
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**Acquisition**

**KNOWLEDGE**

Students will know...

7. [Type Here]
8. [Type Here]

**SKILLS**

Students will be skilled at (be able to do)...

8. [Type Here]
9. [Type Here]

**Stage 2: Assessments/Evidence of Learning**  
*What are the formative (informal) and summative (formal) assessments used to measure learning and growth?*  
*How will you know that they did it?*  
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**Evaluative Criteria**

11. [Type Here]
12. [Type Here]

**Assessment Evidence**

PERFORMANCE TASK(S)/Think GRASPS:  
9. [Type Here]  
10. [Type Here]

7. [Type Here] 8. [Type Here]	OTHER EVIDENCE: 8. [Type Here] 9. [Type Here]
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### Stage 3: Learning Plan

*What are the differentiated instructional strategies, activities, lesson plans that support the enduring understandings and essential questions for all students?  
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*Summary of Key Learning Events and Instruction*

18. [Type Here]  
19. [Type Here]  
20. [Type Here]

### Unit 5 Deliverables - **Delivery of Solution**

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<b>Course Title:</b> Robotic Solutions	<b>Course Author:</b> Gregory Walzer	<b>Grade Level(s):</b> 9-12	<b>Time/Duration:</b> Semester
<b>Course Summary:</b> (optional) Students who participate in <b>Robotic Solutions</b> will discover the future of robotics related technologies. Students will be presented with one (1) build challenge per quarter. Students will research, design, build, and test prototypes using the Scientific Method and Design Thinking Process. A record of their work will be documented in an Engineering Notebook. They will present working prototypes to Trac Fabrication Inc. for feedback and evaluation. In the end, students who elect to take <b>Robotic Solutions</b> will be a part of the growing trend to integrate robotics into our daily lives.			
<b>Unit Name:</b> Deliverables - Delivery of Solution	<b>Unit Number:</b> 5	<b>Created:</b> Fall 2021-Spring	<b>Revised:</b> TBD

		2022	
<b>Standards Addressed:</b> <ul style="list-style-type: none"> <li>[Type Here]</li> </ul>			

<p align="center"><b>Stage 1 Desired Results: Enduring Understandings &amp; Essential Questions</b>  <i>What are the overarching takeaways and big ideas for students?</i>  <a href="#">Jump to Table of Contents</a></p>	
<b>Big Ideas:</b> [Type Here]	
<i>Transfer</i>	
11. [Type Here] 12. [Type Here]	<i>Students will be able to independently use their learning to...</i>
<i>Meaning</i>	
<b>UNDERSTANDINGS</b>  <i>Students will understand that...</i> 16. [Type Here] 17. [Type Here] 18. [Type Here]	
<b>ESSENTIAL QUESTIONS</b>  15. [Type Here] 16. [Type Here]	



**Stage 1: Essential Content, Concepts & Skills**  
*What do we want students to know and be able to do?*  
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*Acquisition*

**KNOWLEDGE**

Students will know...

- 9. [Type Here]
- 10. [Type Here]

**SKILLS**

Students will be skilled at (be able to do)...

- 10. [Type Here]
- 11. [Type Here]

**Stage 2: Assessments/Evidence of Learning**  
*What are the formative (informal) and summative (formal) assessments used to measure learning and growth?*  
*How will you know that they did it?*  
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Evaluative Criteria

Assessment Evidence

13. [Type Here] 14. [Type Here]	PERFORMANCE TASK(S)/Think GRASPS: 11. [Type Here] 12. [Type Here]
9. [Type Here] 10. [Type Here]	OTHER EVIDENCE: 10. [Type Here] 11. [Type Here]

### Stage 3: Learning Plan

*What are the differentiated instructional strategies, activities, lesson plans that support the enduring understandings and essential questions for all students?  
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#### Summary of Key Learning Events and Instruction

- 21. [Type Here]
- 22. [Type Here]
- 23. [Type Here]

## Unit 6 Research Paper - MLA Format

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Course Title: Robotic Solutions	Course Author: Gregory Walzer	Grade Level(s): 9-12	Time/Duration: Semester
Course Summary: (optional) Students who participate in <b>Robotic Solutions</b> will discover the future of robotics related technologies. Students will be presented with one (1) build challenge per quarter. Students will research, design, build, and test prototypes using the Scientific Method and Design Thinking Process. A record			

of their work will be documented in an Engineering Notebook. They will present working prototypes to Trac Fabrication Inc. for feedback and evaluation. In the end, students who elect to take <b>Robotic Solutions</b> will be a part of the growing trend to integrate robotics into our daily lives.			
<b>Unit Name:</b> Research Paper - MLA Format	<b>Unit Number:</b> 6	<b>Created:</b> Fall 2021-Spring 2022	<b>Revised:</b> TBD
<b>Standards Addressed:</b> <ul style="list-style-type: none"> <li>1.2 Reading Informational Text</li> <li>1.4 Writing</li> </ul>			

## Stage 1 Desired Results: Enduring Understandings & Essential Questions

*What are the overarching takeaways and big ideas for students?*

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### Big Ideas:

The goal of a research paper is to draw on what others have to say about a topic and engage the sources in order to thoughtfully offer a unique perspective and understanding of a topic or topics.

### Transfer

*Students will be able to independently use their learning to...*

- 13. Research a topic
- 14. Use the information gained in research to improve design and application

### Meaning

### UNDERSTANDINGS

*Students will understand that...*

- 19. Forming hypotheses

- 20. Collecting data
- 21. Analyzing results
- 22. Forming conclusions
- 23. Implementing findings into real-life applications
- 24. Forming new research questions

#### ESSENTIAL QUESTIONS

- 17. Why is research important?
- 18. How can research be used?

### Stage 1: Essential Content, Concepts & Skills

*What do we want students to know and be able to do?*

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#### *Acquisition*

#### KNOWLEDGE

##### Students will know...

- 11. Study informational texts
- 12. Practice strategies that are genre-specific for expository writing
- 13. Use an inquiry-based approach
- 14. Work individually
- 15. Work collaboratively

#### SKILLS

**Students will be skilled at (be able to do)...**

12. Formulate a logical thesis that expresses a perspective on their research subject
13. Practice research skills, including evaluating their sources, summarizing and paraphrasing significant information, and properly citing their sources
14. Logically group and then sequence their ideas in expository writing
15. Arrange and then display information on maps, graphs and charts
16. Focus on the topic and list events in chronological order

**Stage 2: Assessments/Evidence of Learning**

*What are the formative (informal) and summative (formal) assessments used to measure learning and growth?*

*How will you know that they did it?*

[Jump to Table of Contents](#)

Evaluative Criteria	Assessment Evidence
15. [Type Here] 16. [Type Here]	PERFORMANCE TASK(S)/Think GRASPS: 13. [Type Here] 14. [Type Here]
11. [Type Here] 12. [Type Here]	OTHER EVIDENCE: 12. [Type Here] 13. [Type Here]

**Stage 3: Learning Plan**

*What are the differentiated instructional strategies, activities, lesson plans that support the enduring understandings and essential questions for all students?*

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*Summary of Key Learning Events and Instruction*

24. [Type Here]

25. [Type Here]

26. [Type Here]

## Unit 7 Engineering Notebook - Collection and Reflection

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<b>Course Title:</b> Robotic Solutions	<b>Course Author:</b> Gregory Walzer	<b>Grade Level(s):</b> 9-12	<b>Time/Duration:</b> Semester
<b>Course Summary:</b> (optional) Students who participate in <b>Robotic Solutions</b> will discover the future of robotics related technologies. Students will be presented with one (1) build challenge per quarter. Students will research, design, build, and test prototypes using the Scientific Method and Design Thinking Process. A record of their work will be documented in an Engineering Notebook. They will present working prototypes to Trac Fabrication Inc. for feedback and evaluation. In the end, students who elect to take <b>Robotic Solutions</b> will be a part of the growing trend to integrate robotics into our daily lives.			
<b>Unit Name:</b> Engineering Notebook - Collection and Reflection	<b>Unit Number:</b> 7	<b>Created:</b> Fall 2021-Spring 2022	<b>Revised:</b> TBD
<b>Standards Addressed:</b> <ul style="list-style-type: none"><li>[Type Here]</li></ul>			

### Stage 1 Desired Results: Enduring Understandings & Essential Questions

*What are the overarching takeaways and big ideas for students?*

[Jump to Table of Contents](#)

<b>Big Ideas:</b> [Type Here]
<i>Transfer</i>
<div>Students will be able to independently use their learning to...</div> <div>           15. [Type Here]            16. [Type Here]         </div>
<i>Meaning</i>
<b>UNDERSTANDINGS</b>  <div>Students will understand that...</div> <div>           25. [Type Here]            26. [Type Here]            27. [Type Here]         </div>
<b>ESSENTIAL QUESTIONS</b>  <div>           19. [Type Here]            20. [Type Here]         </div>

**Stage 1: Essential Content, Concepts & Skills**  
*What do we want students to know and be able to do?*  
[Jump to Table of Contents](#)

## Acquisition

### KNOWLEDGE

Students will know...

16. [Type Here]

17. [Type Here]

### SKILLS

Students will be skilled at (be able to do)...

17. [Type Here]

18. [Type Here]

## Stage 2: Assessments/Evidence of Learning

*What are the formative (informal) and summative (formal) assessments used to measure learning and growth?*

*How will you know that they did it?*

[Jump to Table of Contents](#)

### Evaluative Criteria

17. [Type Here]

18. [Type Here]

### Assessment Evidence

PERFORMANCE TASK(S)/Think GRASPS:

15. [Type Here]

16. [Type Here]

13. [Type Here]

14. [Type Here]

OTHER EVIDENCE:

14. [Type Here]

15. [Type Here]

## Stage 3: Learning Plan

*What are the differentiated instructional strategies, activities, lesson plans that support the enduring understandings and essential questions for all students?*



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*Summary of Key Learning Events and Instruction*

27. [Type Here]

28. [Type Here]

29. [Type Here]

## Unit 8 **SCRATCH** Programming

[Jump to Table of Contents](#)

Course Title: [Type Here]	Course Author: [Type Here]	Grade Level(s): [Type Here]	Time/Duration: [Type Here]
Course Summary: (optional) [Type Here]			
Unit Name: [Type Here]	Unit Number: [Type Here]	Created: [Type Here]	Revised: TBD
Standards Addressed: <ul style="list-style-type: none"><li>[Type Here]</li></ul>			

## Stage 1 Desired Results: Enduring Understandings & Essential Questions

*What are the overarching takeaways and big ideas for students?*

[Jump to Table of Contents](#)

<b>Big Ideas:</b> [Type Here]
<i>Transfer</i>
<div>Students will be able to independently use their learning to...</div> <div>           17. [Type Here]            18. [Type Here]         </div>
<i>Meaning</i>
<b>UNDERSTANDINGS</b>  <div>Students will understand that...</div> <div>           28. [Type Here]            29. [Type Here]            30. [Type Here]         </div>
<b>ESSENTIAL QUESTIONS</b>  <div>           21. [Type Here]            22. [Type Here]         </div>

**Stage 1: Essential Content, Concepts & Skills**  
*What do we want students to know and be able to do?*  
[Jump to Table of Contents](#)

### Acquisition

#### KNOWLEDGE

Students will know...

18. [Type Here]

19. [Type Here]

#### SKILLS

Students will be skilled at (be able to do)...

19. [Type Here]

20. [Type Here]

### Stage 2: Assessments/Evidence of Learning

*What are the formative (informal) and summative (formal) assessments used to measure learning and growth?*

*How will you know that they did it?*

[Jump to Table of Contents](#)

#### Evaluative Criteria

#### Assessment Evidence

19. [Type Here]

20. [Type Here]

PERFORMANCE TASK(S)/Think GRASPS:

17. [Type Here]

18. [Type Here]

15. [Type Here]

16. [Type Here]

OTHER EVIDENCE:

16. [Type Here]

17. [Type Here]

### Stage 3: Learning Plan

*What are the differentiated instructional strategies, activities, lesson plans that support the enduring understandings and essential questions for all students?*

*This section provides a summary of the Key Learning Events and Instruction*

*Teachers may summarize the topics within lessons or may utilize [Laurel UbD Lesson Plan Template](#)*

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*Summary of Key Learning Events and Instruction*

30. [Type Here]

31. [Type Here]

32. [Type Here]

## Unit 9 Servos and Sensors

[Jump to Table of Contents](#)

Course Title: [Type Here]	Course Author: [Type Here]	Grade Level(s): [Type Here]	Time/Duration: [Type Here]
Course Summary: (optional) [Type Here]			
Unit Name: [Type Here]	Unit Number: [Type Here]	Created: [Type Here]	Revised: TBD
Standards Addressed: <ul style="list-style-type: none"><li>[Type Here]</li></ul>			

## Stage 1 Desired Results: Enduring Understandings & Essential Questions

*What are the overarching takeaways and big ideas for students?*

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<b>Big Ideas:</b> [Type Here]
<i>Transfer</i>
Students will be able to independently use their learning to...  19. [Type Here] 20. [Type Here]
<i>Meaning</i>
<b>UNDERSTANDINGS</b>  Students will understand that...  31. [Type Here] 32. [Type Here] 33. [Type Here]
<b>ESSENTIAL QUESTIONS</b>  23. [Type Here] 24. [Type Here]

**Stage 1: Essential Content, Concepts & Skills**  
*What do we want students to know and be able to do?*  
[Jump to Table of Contents](#)

## Acquisition

### KNOWLEDGE

Students will know...

20. [Type Here]

21. [Type Here]

### SKILLS

Students will be skilled at (be able to do)...

21. [Type Here]

22. [Type Here]

## Stage 2: Assessments/Evidence of Learning

*What are the formative (informal) and summative (formal) assessments used to measure learning and growth?*

*How will you know that they did it?*

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### Evaluative Criteria

21. [Type Here]

22. [Type Here]

### Assessment Evidence

PERFORMANCE TASK(S)/Think GRASPS:

19. [Type Here]

20. [Type Here]

17. [Type Here]

18. [Type Here]

OTHER EVIDENCE:

18. [Type Here]

19. [Type Here]

## Stage 3: Learning Plan

*What are the differentiated instructional strategies, activities, lesson plans that support the enduring understandings and essential questions for all students?*

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[Jump to Table of Contents](#)

*Summary of Key Learning Events and Instruction*

33. [Type Here]

34. [Type Here]

35. [Type Here]

## Unit 10 [Type Name Here]

[Jump to Table of Contents](#)

Course Title: [Type Here]	Course Author: [Type Here]	Grade Level(s): [Type Here]	Time/Duration: [Type Here]
Course Summary: (optional) [Type Here]			
Unit Name: [Type Here]	Unit Number: [Type Here]	Created: [Type Here]	Revised: TBD
Standards Addressed: <ul style="list-style-type: none"><li>[Type Here]</li></ul>			

## Stage 1 Desired Results: Enduring Understandings & Essential Questions

*What are the overarching takeaways and big ideas for students?*

[Jump to Table of Contents](#)

<b>Big Ideas:</b> [Type Here]
<i>Transfer</i>
<div> <div>21. [Type Here]</div> <div>22. [Type Here]</div> </div> <div>Students will be able to independently use their learning to...</div>
<i>Meaning</i>
<b>UNDERSTANDINGS</b>  Students will understand that... <div> <div>34. [Type Here]</div> <div>35. [Type Here]</div> <div>36. [Type Here]</div> </div>
<b>ESSENTIAL QUESTIONS</b>  <div> <div>25. [Type Here]</div> <div>26. [Type Here]</div> </div>

**Stage 1: Essential Content, Concepts & Skills**  
*What do we want students to know and be able to do?*  
[Jump to Table of Contents](#)



### Acquisition

#### KNOWLEDGE

Students will know...

22. [Type Here]

23. [Type Here]

#### SKILLS

Students will be skilled at (be able to do)...

23. [Type Here]

24. [Type Here]

### Stage 2: Assessments/Evidence of Learning

*What are the formative (informal) and summative (formal) assessments used to measure learning and growth?*

*How will you know that they did it?*

[Jump to Table of Contents](#)

#### Evaluative Criteria

#### Assessment Evidence

23. [Type Here]

24. [Type Here]

PERFORMANCE TASK(S)/Think GRASPS:

21. [Type Here]

22. [Type Here]

19. [Type Here]

20. [Type Here]

OTHER EVIDENCE:

20. [Type Here]

21. [Type Here]

### Stage 3: Learning Plan

*What are the differentiated instructional strategies, activities, lesson plans that support the enduring understandings and essential questions for all students?*

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*Summary of Key Learning Events and Instruction*

36. [Type Here]

37. [Type Here]

38. [Type Here]