



Mon, Mar 19 (Day A)	Tue, Mar 20 (Day B)	Wed, Mar 21 (Day A)	Thu, Mar 22 (Day B)	Fri, Mar 23 (Day A)
			Evans Out - UIL District Meet Kaufman High School	
<p>PRINCIPLES OF APPLIED ENGINEERING - SECTION 1 (8:00 AM - 8:50 AM)</p> <p>Learning Outcomes:</p> <ul style="list-style-type: none"> I will demonstrate my existing knowledge of computer engineering I will demonstrate my research abilities to define key terms related to computer engineering <p>Warm-Up Assignment:</p> <ul style="list-style-type: none"> Login to Computer or Chromebook <p>Review of Prior Knowledge:</p> <ul style="list-style-type: none"> N/A <p>Introduction to New Material: (I Do)</p> <ul style="list-style-type: none"> Intro to Quizlet Flash Cards <p>Guided Practice: (We Do)</p>	<p>PRINCIPLES OF APPLIED ENGINEERING - SECTION 1 (8:00 AM - 8:50 AM)</p> <p>Learning Outcomes:</p> <ul style="list-style-type: none"> I will demonstrate my understanding of logic gates by completing Lab 12-1 <p>Warm-Up Assignment:</p> <ul style="list-style-type: none"> Login to Computer <p>Review of Prior Knowledge:</p> <ul style="list-style-type: none"> Venn Diagrams <p>Introduction to New Material: (I Do)</p> <ul style="list-style-type: none"> Logical / Boolean Operators <p>Guided Practice: (We Do)</p> <ul style="list-style-type: none"> Logical / Boolean Operators with People 	<p>PRINCIPLES OF APPLIED ENGINEERING - SECTION 1 (8:00 AM - 8:50 AM)</p> <p>Learning Outcomes:</p> <ul style="list-style-type: none"> I will demonstrate my understanding of binary numbers by completing Lab 12-4 <p>Warm-Up Assignment:</p> <ul style="list-style-type: none"> Login to Computer <p>Review of Prior Knowledge:</p> <ul style="list-style-type: none"> Number Bases <p>Introduction to New Material: (I Do)</p> <ul style="list-style-type: none"> Base-2 Numbering System <p>Guided Practice: (We Do)</p> <ul style="list-style-type: none"> Converting Base 10 to Base 2 Converting Base 2 to Base 10 	<p>PRINCIPLES OF APPLIED ENGINEERING - SECTION 1 (8:00 AM - 8:50 AM)</p> <p>Learning Outcomes:</p> <ul style="list-style-type: none"> I will demonstrate my understanding of algorithm development by completing Lab 12-2 <p>Warm-Up Assignment:</p> <ul style="list-style-type: none"> Login to Computer <p>Review of Prior Knowledge:</p> <ul style="list-style-type: none"> N/A <p>Introduction to New Material: (I Do)</p> <ul style="list-style-type: none"> N/A <p>Guided Practice: (We Do)</p> <ul style="list-style-type: none"> Play a single round of "Simon Says" with the class. Have students self-monitor and take a seat 	<p>PRINCIPLES OF APPLIED ENGINEERING - SECTION 1 (8:00 AM - 8:50 AM)</p> <p>Learning Outcomes:</p> <ul style="list-style-type: none"> I will demonstrate my understanding of computer architecture by completing Lab 12-3 <p>Warm-Up Assignment:</p> <ul style="list-style-type: none"> N/A <p>Review of Prior Knowledge:</p> <ul style="list-style-type: none"> General Computer Parts <p>Introduction to New Material: (I Do)</p> <ul style="list-style-type: none"> Overview of a Desktop Computer <p>Guided Practice: (We Do)</p> <ul style="list-style-type: none"> Block Diagrams <p>Independent Practice: (You Do)</p>

Mon, Mar 19 (Day A)	Tue, Mar 20 (Day B)	Wed, Mar 21 (Day A)	Thu, Mar 22 (Day B)	Fri, Mar 23 (Day A)
<ul style="list-style-type: none"> N/A <p>Independent Practice: (You Do)</p> <ul style="list-style-type: none"> Complete Unit 12 Pre-Test http://www.g-wlearning.com/technologyeducation/2852/ch12/pre.htm Complete Unit 12 Key Terms Complete Unit 12 Quizlet Activity https://quizlet.com/_418n71 Unit 12 Homework Textbook Page 259 / Google Drive (Due Friday) <p>Graded Items</p> <ul style="list-style-type: none"> Daily Grades (50%) <ul style="list-style-type: none"> Unit 12 Pre-Test Unit 12 Key Terms Unit 12 Vocabulary Activity in Quizlet Unit 12 Math Application (Due Friday) <div data-bbox="117 1284 453 1490" style="background-color: #e0e0e0; padding: 5px;"> <p>Standards/Expectations:</p> <p>1: The student demonstrates professional standards/employability</p> </div>	<p>Independent Practice: (You Do)</p> <ul style="list-style-type: none"> Complete Lab 12-1 <p>Graded Items</p> <ul style="list-style-type: none"> Daily Grades (50%) <ul style="list-style-type: none"> Lab 12-1 <div data-bbox="495 561 835 1471" style="background-color: #e0e0e0; padding: 5px;"> <p>Standards/Expectations:</p> <p>1: The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:</p> <p>1a: demonstrate knowledge of how to dress, speak, and conduct oneself in a manner appropriate for the profession</p> <p>1b: show the ability to cooperate, contribute, and collaborate as a member of a group in an effort to achieve a positive collective outcome</p> <p>2: The student investigates the</p> </div>	<p>Independent Practice: (You Do)</p> <ul style="list-style-type: none"> Complete Lab 12-4 <p>Graded Items</p> <ul style="list-style-type: none"> Daily Grades (50%) <ul style="list-style-type: none"> Lab 12-4 <div data-bbox="877 561 1218 1471" style="background-color: #e0e0e0; padding: 5px;"> <p>Standards/Expectations:</p> <p>1: The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:</p> <p>1a: demonstrate knowledge of how to dress, speak, and conduct oneself in a manner appropriate for the profession</p> <p>1b: show the ability to cooperate, contribute, and collaborate as a member of a group in an effort to achieve a positive collective outcome</p> <p>2: The student investigates the</p> </div>	<p>when they are "out". (Up to 5 Minutes)</p> <ul style="list-style-type: none"> Have students pair-off and play "Guess the number I'm thinking about." with each other. It must be a whole number between 1 and 100. Students are only allowed to respond with "Yes", "No - Too High", or "No - Too Low". Tell students to seriously think about their strategy for determining the number. (10 Minutes) <p>Independent Practice: (You Do)</p> <ul style="list-style-type: none"> Complete Lab 12-2 (Copies On Desk) and Turn in by End of Class (30 Minutes) <p>Graded Items</p> <ul style="list-style-type: none"> Daily Grades (50%) <ul style="list-style-type: none"> Lab 12-2 <div data-bbox="1260 1284 1600 1490" style="background-color: #e0e0e0; padding: 5px;"> <p>Standards/Expectations:</p> <p>1: The student demonstrates professional standards/employability</p> </div>	<ul style="list-style-type: none"> Complete Lab 12-3 <p>Graded Items</p> <ul style="list-style-type: none"> Daily Grades (50%) <ul style="list-style-type: none"> Lab 12-3 <div data-bbox="1642 488 1982 1471" style="background-color: #e0e0e0; padding: 5px;"> <p>Standards/Expectations:</p> <p>1: The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:</p> <p>1a: demonstrate knowledge of how to dress, speak, and conduct oneself in a manner appropriate for the profession</p> <p>1b: show the ability to cooperate, contribute, and collaborate as a member of a group in an effort to achieve a positive collective outcome</p> <p>2: The student investigates the components of engineering and</p> </div>

Mon, Mar 19 (Day A)	Tue, Mar 20 (Day B)	Wed, Mar 21 (Day A)	Thu, Mar 22 (Day B)	Fri, Mar 23 (Day A)
<p>skills as required by business and industry. The student is expected to:</p> <p>1a: demonstrate knowledge of how to dress, speak, and conduct oneself in a manner appropriate for the profession</p> <p>1b: show the ability to cooperate, contribute, and collaborate as a member of a group in an effort to achieve a positive collective outcome</p> <p>2: The student investigates the components of engineering and technology systems. The student is expected to:</p> <p>2d: describe how technological systems interact to achieve common goals</p> <p>2f: conduct and present research on emerging and innovative technology</p> <p>3: The student presents conclusions, research findings, and research</p>	<p>components of engineering and technology systems. The student is expected to:</p> <p>2d: describe how technological systems interact to achieve common goals</p> <p>2f: conduct and present research on emerging and innovative technology</p> <p>3: The student presents conclusions, research findings, and designs using a variety of media throughout the course. The student is expected to:</p> <p>3a: use clear and concise written, verbal, and visual communication techniques</p> <p>3c: use sketching and computer-aided drafting and design (CADD) to develop and present ideas</p> <p>4: The student uses appropriate tools and demonstrates safe work habits. The student is expected to:</p>	<p>components of engineering and technology systems. The student is expected to:</p> <p>2d: describe how technological systems interact to achieve common goals</p> <p>2f: conduct and present research on emerging and innovative technology</p> <p>3: The student presents conclusions, research findings, and designs using a variety of media throughout the course. The student is expected to:</p> <p>3a: use clear and concise written, verbal, and visual communication techniques</p> <p>3c: use sketching and computer-aided drafting and design (CADD) to develop and present ideas</p> <p>4: The student uses appropriate tools and demonstrates safe work habits. The student is expected to:</p>	<p>skills as required by business and industry. The student is expected to:</p> <p>1a: demonstrate knowledge of how to dress, speak, and conduct oneself in a manner appropriate for the profession</p> <p>1b: show the ability to cooperate, contribute, and collaborate as a member of a group in an effort to achieve a positive collective outcome</p> <p>2: The student investigates the components of engineering and technology systems. The student is expected to:</p> <p>2d: describe how technological systems interact to achieve common goals</p> <p>2f: conduct and present research on emerging and innovative technology</p> <p>3: The student presents conclusions, research</p>	<p>technology systems. The student is expected to:</p> <p>2d: describe how technological systems interact to achieve common goals</p> <p>2f: conduct and present research on emerging and innovative technology</p> <p>3: The student presents conclusions, research findings, and designs using a variety of media throughout the course. The student is expected to:</p> <p>3a: use clear and concise written, verbal, and visual communication techniques</p> <p>3c: use sketching and computer-aided drafting and design (CADD) to develop and present ideas</p> <p>4: The student uses appropriate tools and demonstrates safe work habits. The student is expected to:</p>

Mon, Mar 19 (Day A)	Tue, Mar 20 (Day B)	Wed, Mar 21 (Day A)	Thu, Mar 22 (Day B)	Fri, Mar 23 (Day A)
<p>findings, and designs using a variety of media throughout the course. The student is expected to:</p> <p>3a: use clear and concise written, verbal, and visual communication techniques</p> <p>3c: use sketching and computer-aided drafting and design (CADD) to develop and present ideas</p> <p>4: The student uses appropriate tools and demonstrates safe work habits. The student is expected to:</p> <p>4d: dispose of hazardous materials and wastes appropriately</p> <p>7: The student understands the opportunities and careers in fields related to robotics, process control, and automation systems. The student is expected to:</p> <p>7a: describe applications of robotics, process</p>	<p>4d: dispose of hazardous materials and wastes appropriately</p> <p>7: The student understands the opportunities and careers in fields related to robotics, process control, and automation systems. The student is expected to:</p> <p>7a: describe applications of robotics, process control, and automation systems</p> <p>7b: apply design concepts to problems in robotics, process control, and automation systems</p> <p>7c: identify fields and career opportunities related to robotics, process control, and automation systems</p> <p>7d: identify emerging trends in robotics, process control, and automation systems</p> <p>10: The student demonstrates a knowledge of drafting by</p>	<p>4d: dispose of hazardous materials and wastes appropriately</p> <p>7: The student understands the opportunities and careers in fields related to robotics, process control, and automation systems. The student is expected to:</p> <p>7a: describe applications of robotics, process control, and automation systems</p> <p>7b: apply design concepts to problems in robotics, process control, and automation systems</p> <p>7c: identify fields and career opportunities related to robotics, process control, and automation systems</p> <p>7d: identify emerging trends in robotics, process control, and automation systems</p> <p>10: The student demonstrates a knowledge of drafting by</p>	<p>findings, and designs using a variety of media throughout the course. The student is expected to:</p> <p>3a: use clear and concise written, verbal, and visual communication techniques</p> <p>3c: use sketching and computer-aided drafting and design (CADD) to develop and present ideas</p> <p>4: The student uses appropriate tools and demonstrates safe work habits. The student is expected to:</p> <p>4d: dispose of hazardous materials and wastes appropriately</p> <p>7: The student understands the opportunities and careers in fields related to robotics, process control, and automation systems. The student is expected to:</p> <p>7a: describe applications of robotics, process</p>	<p>4d: dispose of hazardous materials and wastes appropriately</p> <p>7: The student understands the opportunities and careers in fields related to robotics, process control, and automation systems. The student is expected to:</p> <p>7a: describe applications of robotics, process control, and automation systems</p> <p>7b: apply design concepts to problems in robotics, process control, and automation systems</p> <p>7c: identify fields and career opportunities related to robotics, process control, and automation systems</p> <p>7d: identify emerging trends in robotics, process control, and automation systems</p> <p>10: The student demonstrates a knowledge of drafting by</p>

Mon, Mar 19 (Day A)	Tue, Mar 20 (Day B)	Wed, Mar 21 (Day A)	Thu, Mar 22 (Day B)	Fri, Mar 23 (Day A)
<p>control, and automation systems</p> <p>7b: apply design concepts to problems in robotics, process control, and automation systems</p> <p>7c: identify fields and career opportunities related to robotics, process control, and automation systems</p> <p>7d: identify emerging trends in robotics, process control, and automation systems</p> <p>10: The student demonstrates a knowledge of drafting by completing a series of drawings that can be published by various media. The student is expected to:</p> <p>10b: store and retrieve geometry</p>	<p>completing a series of drawings that can be published by various media. The student is expected to:</p> <p>10b: store and retrieve geometry</p>	<p>completing a series of drawings that can be published by various media. The student is expected to:</p> <p>10b: store and retrieve geometry</p>	<p>control, and automation systems</p> <p>7b: apply design concepts to problems in robotics, process control, and automation systems</p> <p>7c: identify fields and career opportunities related to robotics, process control, and automation systems</p> <p>7d: identify emerging trends in robotics, process control, and automation systems</p> <p>10: The student demonstrates a knowledge of drafting by completing a series of drawings that can be published by various media. The student is expected to:</p> <p>10b: store and retrieve geometry</p>	<p>completing a series of drawings that can be published by various media. The student is expected to:</p> <p>10b: store and retrieve geometry</p>
<p>COMPUTER SCIENCE 1 - SECTION 1 (8:54 AM - 10:24 AM)</p> <p>Learning Outcomes:</p>	<p>COMPUTER SCIENCE 2 (8:54 AM - 10:24 AM)</p> <p>UIL District Meet is Thursday.</p> <p>- Prepare UIL Laptop 1</p>	<p>COMPUTER SCIENCE 1 - SECTION 1 (8:54 AM - 10:24 AM)</p> <p>Learning Outcomes:</p>	<p>COMPUTER SCIENCE 2 (8:54 AM - 10:24 AM)</p> <p>This class has 7 students on the roster. 1 student is at</p>	<p>COMPUTER SCIENCE 1 - SECTION 1 (8:54 AM - 10:24 AM)</p> <p>Learning Outcomes:</p>

Mon, Mar 19 (Day A)	Tue, Mar 20 (Day B)	Wed, Mar 21 (Day A)	Thu, Mar 22 (Day B)	Fri, Mar 23 (Day A)
<ul style="list-style-type: none"> I will demonstrate mastery of algorithm development I will demonstrate my understanding of application input by creating a program that asks users for various inputs. I will demonstrate my understanding of matrices by processing the user input into an application. <p>Warm-Up Assignment:</p> <ul style="list-style-type: none"> Turn-On and Log-In to Computer Log-In to Repl.it <p>Review of Prior Knowledge:</p> <ul style="list-style-type: none"> Review Keyboard Input Review Matrix (2-D Arrays) <p>Introduction to New Material: (I Do)</p> <ul style="list-style-type: none"> Review Project Expectations <ul style="list-style-type: none"> Program will ask for user class schedule 	<p>Run Dry Run Problem - Prepare UIL Laptop 2 Run Dry Run Problem</p>	<ul style="list-style-type: none"> I will demonstrate mastery of algorithm refinement I will demonstrate my understanding of application input by creating a program that asks users for various inputs. I will demonstrate my understanding of matrices by processing the user input into an application. <p>Warm-Up Assignment:</p> <ul style="list-style-type: none"> Turn-On and Log-In to Computer Log-In to Repl.it <p>Review of Prior Knowledge:</p> <ul style="list-style-type: none"> Review Keyboard Input Review Matrix (2-D Arrays) <p>Introduction to New Material: (I Do)</p> <ul style="list-style-type: none"> Review Project Expectations <ul style="list-style-type: none"> Program will ask for user class schedule 	<p>AEP and 4 students are with me competing in the UIL Computer Science event in Kaufman. That leaves you with 2 students present.</p> <p>Encourage these 2 students to use their time wisely and work on any missing assignments they may have for other teachers.</p>	<ul style="list-style-type: none"> I will demonstrate mastery of algorithm refinement I will demonstrate my understanding of application input by creating a program that asks users for various inputs. I will demonstrate my understanding of matrices by processing the user input into an application. <p>Warm-Up Assignment:</p> <ul style="list-style-type: none"> Turn-On and Log-In to Computer Log-In to Repl.it <p>Review of Prior Knowledge:</p> <ul style="list-style-type: none"> Review Keyboard Input Review Matrix (2-D Arrays) <p>Introduction to New Material: (I Do)</p> <ul style="list-style-type: none"> Review Project Expectations <ul style="list-style-type: none"> Program will ask for user class schedule

Mon, Mar 19 (Day A)	Tue, Mar 20 (Day B)	Wed, Mar 21 (Day A)	Thu, Mar 22 (Day B)	Fri, Mar 23 (Day A)
<ul style="list-style-type: none"> ◦ Program will ask if full-year or half-year course ◦ Program will ask for S1 grade, if applicable ◦ Program will ask for Q3 grade ◦ Program will calculate the minimum Q4 and SE2 grades for an A, B, and C in the course <p>Guided Practice: (We Do)</p> <ul style="list-style-type: none"> • Semester Grade Calculations (45, 45, 10) • Annual Grade Calculations (50, 50) <p>Independent Practice: (You Do)</p> <ul style="list-style-type: none"> • Create an algorithm that will calculate the minimum grade for 70, 80, and 90 given S1, and Q3 grade. <p>Graded Items</p> <ul style="list-style-type: none"> • Daily Grades (50%) <ul style="list-style-type: none"> ◦ Algorithm Development <div style="border: 1px solid gray; border-radius: 10px; padding: 5px; margin-top: 10px; background-color: #f0f0f0;"> <p><i>Standards/Expectations:</i></p> </div>		<ul style="list-style-type: none"> ◦ Program will ask if full-year or half-year course ◦ Program will ask for S1 grade, if applicable ◦ Program will ask for Q3 grade ◦ Program will calculate the minimum Q4 and SE2 grades for an A, B, and C in the course <p>Guided Practice: (We Do)</p> <ul style="list-style-type: none"> • Semester Grade Calculations (45, 45, 10) • Annual Grade Calculations (50, 50) <p>Independent Practice: (You Do)</p> <ul style="list-style-type: none"> • Create an algorithm that will calculate the minimum grade for 70, 80, and 90 given S1, and Q3 grade. <p>Graded Items</p> <ul style="list-style-type: none"> • None <ul style="list-style-type: none"> ◦ Project Grade at Conclusion <div style="border: 1px solid gray; border-radius: 10px; padding: 5px; margin-top: 10px; background-color: #f0f0f0;"> <p><i>Standards/Expectations:</i></p> </div>		<ul style="list-style-type: none"> ◦ Program will ask if full-year or half-year course ◦ Program will ask for S1 grade, if applicable ◦ Program will ask for Q3 grade ◦ Program will calculate the minimum Q4 and SE2 grades for an A, B, and C in the course <p>Guided Practice: (We Do)</p> <ul style="list-style-type: none"> • Semester Grade Calculations (45, 45, 10) • Annual Grade Calculations (50, 50) <p>Independent Practice: (You Do)</p> <ul style="list-style-type: none"> • Create an algorithm that will calculate the minimum grade for 70, 80, and 90 given S1, and Q3 grade. <p>Graded Items</p> <ul style="list-style-type: none"> • None <ul style="list-style-type: none"> ◦ Project Grade at Conclusion <div style="border: 1px solid gray; border-radius: 10px; padding: 5px; margin-top: 10px; background-color: #f0f0f0;"> <p><i>Standards/Expectations:</i></p> </div>

Mon, Mar 19 (Day A)	Tue, Mar 20 (Day B)	Wed, Mar 21 (Day A)	Thu, Mar 22 (Day B)	Fri, Mar 23 (Day A)
<p>c.4.: Critical thinking, problem solving, and decision making. The student uses appropriate strategies to analyze problems and design algorithms. The student is expected to:</p> <p>c.4.A.: use program design problem-solving strategies to create program solutions;</p> <p>c.4.B.: define and specify the purpose and goals of solving a problem;</p> <p>c.4.C.: identify the subtasks needed to solve a problem;</p> <p>c.4.D.: identify the data types and objects needed to solve a problem;</p> <p>c.K.: explore common algorithms, including finding greatest common divisor, finding the biggest number out of three, finding primes, making change, and finding the average;</p>		<p>c.4.: Critical thinking, problem solving, and decision making. The student uses appropriate strategies to analyze problems and design algorithms. The student is expected to:</p> <p>c.4.A.: use program design problem-solving strategies to create program solutions;</p> <p>c.4.B.: define and specify the purpose and goals of solving a problem;</p> <p>c.4.C.: identify the subtasks needed to solve a problem;</p> <p>c.4.D.: identify the data types and objects needed to solve a problem;</p> <p>c.K.: explore common algorithms, including finding greatest common divisor, finding the biggest number out of three, finding primes, making change, and finding the average;</p>		<p>c.4.: Critical thinking, problem solving, and decision making. The student uses appropriate strategies to analyze problems and design algorithms. The student is expected to:</p> <p>c.4.A.: use program design problem-solving strategies to create program solutions;</p> <p>c.4.B.: define and specify the purpose and goals of solving a problem;</p> <p>c.4.C.: identify the subtasks needed to solve a problem;</p> <p>c.4.D.: identify the data types and objects needed to solve a problem;</p> <p>c.K.: explore common algorithms, including finding greatest common divisor, finding the biggest number out of three, finding primes, making change, and finding the average;</p>

Mon, Mar 19 (Day A)	Tue, Mar 20 (Day B)	Wed, Mar 21 (Day A)	Thu, Mar 22 (Day B)	Fri, Mar 23 (Day A)
<p>c.K.L.: analyze and modify existing code to improve the underlying algorithm;</p> <p>c.K.N.: select the most appropriate algorithm for a defined problem;</p> <p>EU.4.1: Algorithms are precise sequences of instructions for processes that can be executed by a computer and are implemented using programming languages.</p> <p>LO.4.1.1: Develop an algorithm for implementation in a program. [P2]</p> <p>EK.4.1.1G: Knowledge of standard algorithms can help in constructing new algorithms.</p>		<p>c.K.L.: analyze and modify existing code to improve the underlying algorithm;</p> <p>c.K.N.: select the most appropriate algorithm for a defined problem;</p> <p>EU.4.1: Algorithms are precise sequences of instructions for processes that can be executed by a computer and are implemented using programming languages.</p> <p>LO.4.1.1: Develop an algorithm for implementation in a program. [P2]</p> <p>EK.4.1.1G: Knowledge of standard algorithms can help in constructing new algorithms.</p>		<p>c.K.L.: analyze and modify existing code to improve the underlying algorithm;</p> <p>c.K.N.: select the most appropriate algorithm for a defined problem;</p> <p>EU.4.1: Algorithms are precise sequences of instructions for processes that can be executed by a computer and are implemented using programming languages.</p> <p>LO.4.1.1: Develop an algorithm for implementation in a program. [P2]</p> <p>EK.4.1.1G: Knowledge of standard algorithms can help in constructing new algorithms.</p>
<p>ROBOTICS I & II - SECTION 1 (10:28 AM - 12:02 PM)</p> <p>Learning Outcomes:</p> <ul style="list-style-type: none"> I will demonstrate my engineering skills to build and program a LEGO Mindstorm EV3 racer. <p>Warm-Up Assignment:</p>	<p>ROBOTICS I & II - SECTION 2 (10:28 AM - 12:02 PM)</p> <p>Learning Outcomes:</p> <ul style="list-style-type: none"> I will demonstrate my engineering skills to build and program a LEGO Mindstorm EV3 racer. <p>Warm-Up Assignment:</p>	<p>ROBOTICS I & II - SECTION 1 (10:28 AM - 12:02 PM)</p> <p>Learning Outcomes:</p> <ul style="list-style-type: none"> I will demonstrate my engineering skills to build and program a LEGO Mindstorm EV3 racer. 	<p>ROBOTICS I & II - SECTION 2 (10:28 AM - 12:02 PM)</p> <p>Learning Outcomes:</p> <ul style="list-style-type: none"> I will demonstrate my engineering skills to build and program a LEGO Mindstorm EV3 racer. 	<p>ROBOTICS I & II - SECTION 1 (10:28 AM - 12:02 PM)</p>

Mon, Mar 19 (Day A)	Tue, Mar 20 (Day B)	Wed, Mar 21 (Day A)	Thu, Mar 22 (Day B)	Fri, Mar 23 (Day A)
<ul style="list-style-type: none"> • Gear Ratios <p>Review of Prior Knowledge:</p> <ul style="list-style-type: none"> • Gear Ratios <p>Introduction to New Material: (I Do)</p> <ul style="list-style-type: none"> • Overview of Parts <p>Independent Practice: (You Do)</p> <ul style="list-style-type: none"> • Build a LEGO Tricycle <div data-bbox="117 727 457 1442" style="background-color: #f0f0f0; padding: 10px; margin-top: 10px;"> <p>Standards/Expectations:</p> <p>c7B: demonstrate knowledge of motors, gears, gear ratios, and gear trains used in the robotic systems;</p> <p>c8B: describe the relationship between torque and gear ratio to weight of payload in a robotic arm operation; and</p> <p>c8C: demonstrate knowledge of linkages and gearing in end effectors used in a robotic arm system.</p> </div>	<ul style="list-style-type: none"> • Gear Ratios <p>Review of Prior Knowledge:</p> <ul style="list-style-type: none"> • Gear Ratios <p>Introduction to New Material: (I Do)</p> <ul style="list-style-type: none"> • Overview of Parts <p>Independent Practice: (You Do)</p> <ul style="list-style-type: none"> • Build a LEGO Tricycle <div data-bbox="497 727 840 1442" style="background-color: #f0f0f0; padding: 10px; margin-top: 10px;"> <p>Standards/Expectations:</p> <p>c7B: demonstrate knowledge of motors, gears, gear ratios, and gear trains used in the robotic systems;</p> <p>c8B: describe the relationship between torque and gear ratio to weight of payload in a robotic arm operation; and</p> <p>c8C: demonstrate knowledge of linkages and gearing in end effectors used in a robotic arm system.</p> </div>	<ul style="list-style-type: none"> • I will demonstrate my understanding of engineering tests. <p>Warm-Up Assignment:</p> <ul style="list-style-type: none"> • N/A <p>Review of Prior Knowledge:</p> <ul style="list-style-type: none"> • N/A <p>Introduction to New Material: (I Do)</p> <ul style="list-style-type: none"> • N/A <p>Independent Practice: (You Do)</p> <ul style="list-style-type: none"> • Run the completed LEGO Mindstorm EV3 racer through different time trials in the hallway. • Divide class into 4 groups (about 6 per group) <ul style="list-style-type: none"> ◦ Each group is to complete 6 time trials. <ul style="list-style-type: none"> ▪ One person will need to be at the starting line to start the robot on its race. ▪ One person will need to be at the 	<ul style="list-style-type: none"> • I will demonstrate my understanding of engineering tests. <p>Warm-Up Assignment:</p> <ul style="list-style-type: none"> • N/A <p>Review of Prior Knowledge:</p> <ul style="list-style-type: none"> • N/A <p>Introduction to New Material: (I Do)</p> <ul style="list-style-type: none"> • N/A <p>Independent Practice: (You Do)</p> <ul style="list-style-type: none"> • Run the completed LEGO Mindstorm EV3 racer through different time trials in the hallway. • Divide class into 4 groups (about 6 per group) <ul style="list-style-type: none"> ◦ Each group is to complete 6 time trials using the attached sheets. Each run is 40 feet (40 floor tiles) <ul style="list-style-type: none"> ▪ One person will need to be at the starting line to start 	

Mon, Mar 19 (Day A)	Tue, Mar 20 (Day B)	Wed, Mar 21 (Day A)	Thu, Mar 22 (Day B)	Fri, Mar 23 (Day A)
<p>c9B: demonstrate an understanding and apply the concepts of torque, gear ratio, stability, and weight of payload in a robotic or automated system arm operation; and</p> <p>c9C: demonstrate an understanding and apply the concepts of linkages and gearing in end effectors and their use in a robotic or an automated arm system.</p> <p>c7D: describe the operation of direct current (DC) motors, including control, speed, and torque; and</p> <p>c7E: describe the operation of servo motors, including control, angle, and torque.</p> <p>c7F: apply the operation of direct current (DC) motors, including control, speed, and torque;</p> <p>c7G: apply the operation of servo motors, including control, angle, and torque;</p>	<p>c9B: demonstrate an understanding and apply the concepts of torque, gear ratio, stability, and weight of payload in a robotic or automated system arm operation; and</p> <p>c9C: demonstrate an understanding and apply the concepts of linkages and gearing in end effectors and their use in a robotic or an automated arm system.</p> <p>c7D: describe the operation of direct current (DC) motors, including control, speed, and torque; and</p> <p>c7E: describe the operation of servo motors, including control, angle, and torque.</p> <p>c7F: apply the operation of direct current (DC) motors, including control, speed, and torque;</p> <p>c7G: apply the operation of servo motors, including control, angle, and torque;</p>	<p>finish line to stop the robot, if it doesn't stop on its own.</p> <ul style="list-style-type: none"> ▪ One person will need to be running a stopwatch (use their phone) to time each run. ▪ One person will need to be documenting the outcome of each run <ul style="list-style-type: none"> ▪ How straight was the drive? ▪ What was the time for each run? ▪ What was the speed for each run (meters per second)? ▪ The remaining team members will shadow someone else <p>◦ Each team is to submit their complete documentation to</p>	<p>the robot on its race.</p> <ul style="list-style-type: none"> ▪ One person will need to be at the finish line to stop the robot, if it doesn't stop on its own. (40 floor tiles away) ▪ One person will need to be running a stopwatch (use their phone) to time each run. ▪ One person will need to be documenting the outcome of each run <ul style="list-style-type: none"> ▪ How straight was the drive? ▪ What was the time for each run? ▪ What was the speed for each run (meters per second)? ▪ The remaining team members will 	

Mon, Mar 19 (Day A)	Tue, Mar 20 (Day B)	Wed, Mar 21 (Day A)	Thu, Mar 22 (Day B)	Fri, Mar 23 (Day A)
<p>c8: The student creates a program to control a robotic or automated system. The student is expected to:</p> <p>c8B: use programming best practices for commenting and documentation;</p> <p>c8C: describe how and why logic is used to control the flow of the program;</p> <p>c8D: create a program flowchart and write the pseudocode for a program to perform an operation;</p>	<p>c8: The student creates a program to control a robotic or automated system. The student is expected to:</p> <p>c8B: use programming best practices for commenting and documentation;</p> <p>c8C: describe how and why logic is used to control the flow of the program;</p> <p>c8D: create a program flowchart and write the pseudocode for a program to perform an operation;</p>	<p>Google Classroom by the end of class.</p> <p>Standards/Expectations:</p> <p>c7B: demonstrate knowledge of motors, gears, gear ratios, and gear trains used in the robotic systems;</p> <p>c8B: describe the relationship between torque and gear ratio to weight of payload in a robotic arm operation; and</p> <p>c8C: demonstrate knowledge of linkages and gearing in end effectors used in a robotic arm system.</p> <p>c9B: demonstrate an understanding and apply the concepts of torque, gear ratio, stability, and weight of payload in a robotic or automated system arm operation; and</p> <p>c9C: demonstrate an understanding and apply the concepts of linkages and gearing in end effectors and their use in a</p>	<p>shadow someone else</p> <ul style="list-style-type: none"> ◦ Each team is to submit their complete documentation by the end of class. <p>Standards/Expectations:</p> <p>c7B: demonstrate knowledge of motors, gears, gear ratios, and gear trains used in the robotic systems;</p> <p>c8B: describe the relationship between torque and gear ratio to weight of payload in a robotic arm operation; and</p> <p>c8C: demonstrate knowledge of linkages and gearing in end effectors used in a robotic arm system.</p> <p>c9B: demonstrate an understanding and apply the concepts of torque, gear ratio, stability, and weight of payload in a robotic or automated system arm operation; and</p>	

Mon, Mar 19 (Day A)	Tue, Mar 20 (Day B)	Wed, Mar 21 (Day A)	Thu, Mar 22 (Day B)	Fri, Mar 23 (Day A)
		<p>robotic or an automated arm system.</p> <p>c7D: describe the operation of direct current (DC) motors, including control, speed, and torque; and</p> <p>c7E: describe the operation of servo motors, including control, angle, and torque.</p> <p>c7F: apply the operation of direct current (DC) motors, including control, speed, and torque;</p> <p>c7G: apply the operation of servo motors, including control, angle, and torque;</p> <p>c8: The student creates a program to control a robotic or automated system. The student is expected to:</p> <p>c8B: use programming best practices for commenting and documentation;</p> <p>c8C: describe how and why logic is used to</p>	<p>c9C: demonstrate an understanding and apply the concepts of linkages and gearing in end effectors and their use in a robotic or an automated arm system.</p> <p>c7D: describe the operation of direct current (DC) motors, including control, speed, and torque; and</p> <p>c7E: describe the operation of servo motors, including control, angle, and torque.</p> <p>c7F: apply the operation of direct current (DC) motors, including control, speed, and torque;</p> <p>c7G: apply the operation of servo motors, including control, angle, and torque;</p> <p>c8: The student creates a program to control a robotic or automated system. The student is expected to:</p> <p>c8B: use programming best practices for</p>	

Mon, Mar 19 (Day A)	Tue, Mar 20 (Day B)	Wed, Mar 21 (Day A)	Thu, Mar 22 (Day B)	Fri, Mar 23 (Day A)
		<p>control the flow of the program;</p> <p>c8D: create a program flowchart and write the pseudocode for a program to perform an operation;</p>	<p>commenting and documentation;</p> <p>c8C: describe how and why logic is used to control the flow of the program;</p> <p>c8D: create a program flowchart and write the pseudocode for a program to perform an operation;</p>	
<p>COMPUTER SCIENCE 1 - SECTION 2 (1:06 PM - 2:36 PM)</p> <p>Learning Outcomes:</p> <ul style="list-style-type: none"> I will demonstrate mastery of algorithm development I will demonstrate my understanding of application input by creating a program that asks users for various inputs. I will demonstrate my understanding of matrices by processing the user input into an application. <p>Warm-Up Assignment:</p>	<p>PRINCIPLES OF APPLIED ENGINEERING - SECTION 2 (2:40 PM - 3:30 PM)</p> <p>Learning Outcomes:</p> <ul style="list-style-type: none"> I will demonstrate my understanding of logic gates by completing Lab 12-1 <p>Warm-Up Assignment:</p> <ul style="list-style-type: none"> Login to Computer <p>Review of Prior Knowledge:</p> <ul style="list-style-type: none"> Venn Diagrams <p>Introduction to New Material: (I Do)</p>	<p>COMPUTER SCIENCE 1 - SECTION 2 (1:06 PM - 2:36 PM)</p> <p>Learning Outcomes:</p> <ul style="list-style-type: none"> I will demonstrate mastery of algorithm refinement I will demonstrate my understanding of application input by creating a program that asks users for various inputs. I will demonstrate my understanding of matrices by processing the user input into an application. <p>Warm-Up Assignment:</p>	<p>PRINCIPLES OF APPLIED ENGINEERING - SECTION 2 (2:40 PM - 3:30 PM)</p> <p>Learning Outcomes:</p> <ul style="list-style-type: none"> I will demonstrate my understanding of algorithm development by completing Lab 12-2 <p>Warm-Up Assignment:</p> <ul style="list-style-type: none"> Login to Computer <p>Review of Prior Knowledge:</p> <ul style="list-style-type: none"> N/A <p>Introduction to New Material: (I Do)</p> <ul style="list-style-type: none"> N/A 	<p>COMPUTER SCIENCE 1 - SECTION 2 (1:06 PM - 2:36 PM)</p> <p>Learning Outcomes:</p> <ul style="list-style-type: none"> I will demonstrate mastery of algorithm refinement I will demonstrate my understanding of application input by creating a program that asks users for various inputs. I will demonstrate my understanding of matrices by processing the user input into an application. <p>Warm-Up Assignment:</p>

Mon, Mar 19 (Day A)	Tue, Mar 20 (Day B)	Wed, Mar 21 (Day A)	Thu, Mar 22 (Day B)	Fri, Mar 23 (Day A)
<ul style="list-style-type: none"> • Turn-On and Log-In to Computer • Log-In to Repl.it <p>Review of Prior Knowledge:</p> <ul style="list-style-type: none"> • Review Keyboard Input • Review Matrix (2-D Arrays) <p>Introduction to New Material: (I Do)</p> <ul style="list-style-type: none"> • Review Project Expectations <ul style="list-style-type: none"> ◦ Program will ask for user class schedule ◦ Program will ask if full-year or half-year course ◦ Program will ask for S1 grade, if applicable ◦ Program will ask for Q3 grade ◦ Program will calculate the minimum Q4 and SE2 grades for an A, B, and C in the course <p>Guided Practice: (We Do)</p> <ul style="list-style-type: none"> • Semester Grade Calculations (45, 45, 10) 	<ul style="list-style-type: none"> • Logical / Boolean Operators <p>Guided Practice: (We Do)</p> <ul style="list-style-type: none"> • Logical / Boolean Operators with People <p>Independent Practice: (You Do)</p> <ul style="list-style-type: none"> • Complete Lab 12-1 <p>Graded Items</p> <ul style="list-style-type: none"> • Daily Grades (50%) <ul style="list-style-type: none"> ◦ Lab 12-1 <div data-bbox="499 841 835 1425" style="border: 1px solid gray; padding: 5px; background-color: #f0f0f0;"> <p>Standards/Expectations:</p> <p>1: The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:</p> <p>1a: demonstrate knowledge of how to dress, speak, and conduct oneself in a manner appropriate for the profession</p> </div>	<ul style="list-style-type: none"> • Turn-On and Log-In to Computer • Log-In to Repl.it <p>Review of Prior Knowledge:</p> <ul style="list-style-type: none"> • Review Keyboard Input • Review Matrix (2-D Arrays) <p>Introduction to New Material: (I Do)</p> <ul style="list-style-type: none"> • Review Project Expectations <ul style="list-style-type: none"> ◦ Program will ask for user class schedule ◦ Program will ask if full-year or half-year course ◦ Program will ask for S1 grade, if applicable ◦ Program will ask for Q3 grade ◦ Program will calculate the minimum Q4 and SE2 grades for an A, B, and C in the course <p>Guided Practice: (We Do)</p> <ul style="list-style-type: none"> • Semester Grade Calculations (45, 45, 10) 	<p>Guided Practice: (We Do)</p> <ul style="list-style-type: none"> • Play a single round of "Simon Says" with the class. Have students self-monitor and take a seat when they are "out". (Up to 5 Minutes) • Have students pair-off and play "Guess the number I'm thinking about." with each other. It must be a whole number between 1 and 100. Students are only allowed to respond with "Yes", "No - Too High", or "No - Too Low". Tell students to seriously think about their strategy for determining the number. (10 Minutes) <p>Independent Practice: (You Do)</p> <ul style="list-style-type: none"> • Complete Lab 12-2 (Copies On Desk) and Turn in by End of Class (30 Minutes) <p>Graded Items</p> <ul style="list-style-type: none"> • Daily Grades (50%) <ul style="list-style-type: none"> ◦ Lab 12-2 	<ul style="list-style-type: none"> • Turn-On and Log-In to Computer • Log-In to Repl.it <p>Review of Prior Knowledge:</p> <ul style="list-style-type: none"> • Review Keyboard Input • Review Matrix (2-D Arrays) <p>Introduction to New Material: (I Do)</p> <ul style="list-style-type: none"> • Review Project Expectations <ul style="list-style-type: none"> ◦ Program will ask for user class schedule ◦ Program will ask if full-year or half-year course ◦ Program will ask for S1 grade, if applicable ◦ Program will ask for Q3 grade ◦ Program will calculate the minimum Q4 and SE2 grades for an A, B, and C in the course <p>Guided Practice: (We Do)</p> <ul style="list-style-type: none"> • Semester Grade Calculations (45, 45, 10)

Mon, Mar 19 (Day A)	Tue, Mar 20 (Day B)	Wed, Mar 21 (Day A)	Thu, Mar 22 (Day B)	Fri, Mar 23 (Day A)
<ul style="list-style-type: none"> Annual Grade Calculations (50, 50) <p>Independent Practice: (You Do)</p> <ul style="list-style-type: none"> Create an algorithm that will calculate the minimum grade for 70, 80, and 90 given S1, and Q3 grade. <p>Graded Items</p> <ul style="list-style-type: none"> Daily Grades (50%) <ul style="list-style-type: none"> Algorithm Development <div data-bbox="117 743 457 1425" style="border: 1px solid gray; padding: 5px; margin-top: 10px;"> <p>Standards/Expectations:</p> <p>c.4.: Critical thinking, problem solving, and decision making. The student uses appropriate strategies to analyze problems and design algorithms. The student is expected to:</p> <p>c.4.A.: use program design problem-solving strategies to create program solutions;</p> <p>c.4.B.: define and specify the purpose and goals of solving a problem;</p> </div>	<div data-bbox="499 207 835 1448" style="border: 1px solid gray; padding: 5px;"> <p>1b: show the ability to cooperate, contribute, and collaborate as a member of a group in an effort to achieve a positive collective outcome</p> <p>2: The student investigates the components of engineering and technology systems. The student is expected to:</p> <p>2d: describe how technological systems interact to achieve common goals</p> <p>2f: conduct and present research on emerging and innovative technology</p> <p>3: The student presents conclusions, research findings, and designs using a variety of media throughout the course. The student is expected to:</p> <p>3a: use clear and concise written, verbal, and visual communication techniques</p> </div>	<ul style="list-style-type: none"> Annual Grade Calculations (50, 50) <p>Independent Practice: (You Do)</p> <ul style="list-style-type: none"> Create an algorithm that will calculate the minimum grade for 70, 80, and 90 given S1, and Q3 grade. <p>Graded Items</p> <ul style="list-style-type: none"> None <ul style="list-style-type: none"> Project Grade at Conclusion <div data-bbox="879 789 1215 1464" style="border: 1px solid gray; padding: 5px; margin-top: 10px;"> <p>Standards/Expectations:</p> <p>c.4.: Critical thinking, problem solving, and decision making. The student uses appropriate strategies to analyze problems and design algorithms. The student is expected to:</p> <p>c.4.A.: use program design problem-solving strategies to create program solutions;</p> <p>c.4.B.: define and specify the purpose and goals of solving a problem;</p> </div>	<p>Standards/Expectations:</p> <p>1: The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:</p> <p>1a: demonstrate knowledge of how to dress, speak, and conduct oneself in a manner appropriate for the profession</p> <p>1b: show the ability to cooperate, contribute, and collaborate as a member of a group in an effort to achieve a positive collective outcome</p> <p>2: The student investigates the components of engineering and technology systems. The student is expected to:</p> <p>2d: describe how technological systems interact to achieve common goals</p>	<ul style="list-style-type: none"> Annual Grade Calculations (50, 50) <p>Independent Practice: (You Do)</p> <ul style="list-style-type: none"> Create an algorithm that will calculate the minimum grade for 70, 80, and 90 given S1, and Q3 grade. <p>Graded Items</p> <ul style="list-style-type: none"> None <ul style="list-style-type: none"> Project Grade at Conclusion <div data-bbox="1640 789 1976 1464" style="border: 1px solid gray; padding: 5px; margin-top: 10px;"> <p>Standards/Expectations:</p> <p>c.4.: Critical thinking, problem solving, and decision making. The student uses appropriate strategies to analyze problems and design algorithms. The student is expected to:</p> <p>c.4.A.: use program design problem-solving strategies to create program solutions;</p> <p>c.4.B.: define and specify the purpose and goals of solving a problem;</p> </div>

Mon, Mar 19 (Day A)	Tue, Mar 20 (Day B)	Wed, Mar 21 (Day A)	Thu, Mar 22 (Day B)	Fri, Mar 23 (Day A)
<p>c.4.C.: identify the subtasks needed to solve a problem;</p> <p>c.4.D.: identify the data types and objects needed to solve a problem;</p> <p>c.K.: explore common algorithms, including finding greatest common divisor, finding the biggest number out of three, finding primes, making change, and finding the average;</p> <p>c.K.L.: analyze and modify existing code to improve the underlying algorithm;</p> <p>c.K.N.: select the most appropriate algorithm for a defined problem;</p> <p>EU.4.1: Algorithms are precise sequences of instructions for processes that can be executed by a computer and are implemented using programming languages.</p> <p>LO.4.1.1: Develop an algorithm for implementation in a program. [P2]</p>	<p>3c: use sketching and computer-aided drafting and design (CADD) to develop and present ideas</p> <p>4: The student uses appropriate tools and demonstrates safe work habits. The student is expected to:</p> <p>4d: dispose of hazardous materials and wastes appropriately</p> <p>7: The student understands the opportunities and careers in fields related to robotics, process control, and automation systems. The student is expected to:</p> <p>7a: describe applications of robotics, process control, and automation systems</p> <p>7b: apply design concepts to problems in robotics, process control, and automation systems</p> <p>7c: identify fields and career opportunities related to robotics,</p>	<p>c.4.C.: identify the subtasks needed to solve a problem;</p> <p>c.4.D.: identify the data types and objects needed to solve a problem;</p> <p>c.K.: explore common algorithms, including finding greatest common divisor, finding the biggest number out of three, finding primes, making change, and finding the average;</p> <p>c.K.L.: analyze and modify existing code to improve the underlying algorithm;</p> <p>c.K.N.: select the most appropriate algorithm for a defined problem;</p> <p>EU.4.1: Algorithms are precise sequences of instructions for processes that can be executed by a computer and are implemented using programming languages.</p> <p>LO.4.1.1: Develop an algorithm for implementation in a program. [P2]</p>	<p>2f: conduct and present research on emerging and innovative technology</p> <p>3: The student presents conclusions, research findings, and designs using a variety of media throughout the course. The student is expected to:</p> <p>3a: use clear and concise written, verbal, and visual communication techniques</p> <p>3c: use sketching and computer-aided drafting and design (CADD) to develop and present ideas</p> <p>4: The student uses appropriate tools and demonstrates safe work habits. The student is expected to:</p> <p>4d: dispose of hazardous materials and wastes appropriately</p> <p>7: The student understands the opportunities and careers in fields related to robotics, process control,</p>	<p>c.4.C.: identify the subtasks needed to solve a problem;</p> <p>c.4.D.: identify the data types and objects needed to solve a problem;</p> <p>c.K.: explore common algorithms, including finding greatest common divisor, finding the biggest number out of three, finding primes, making change, and finding the average;</p> <p>c.K.L.: analyze and modify existing code to improve the underlying algorithm;</p> <p>c.K.N.: select the most appropriate algorithm for a defined problem;</p> <p>EU.4.1: Algorithms are precise sequences of instructions for processes that can be executed by a computer and are implemented using programming languages.</p> <p>LO.4.1.1: Develop an algorithm for implementation in a program. [P2]</p>

Mon, Mar 19 (Day A)	Tue, Mar 20 (Day B)	Wed, Mar 21 (Day A)	Thu, Mar 22 (Day B)	Fri, Mar 23 (Day A)
<p>EK.4.1.1G: Knowledge of standard algorithms can help in constructing new algorithms.</p>	<p>process control, and automation systems</p> <p>7d: identify emerging trends in robotics, process control, and automation systems</p> <p>10: The student demonstrates a knowledge of drafting by completing a series of drawings that can be published by various media. The student is expected to:</p> <p>10b: store and retrieve geometry</p>	<p>EK.4.1.1G: Knowledge of standard algorithms can help in constructing new algorithms.</p>	<p>and automation systems. The student is expected to:</p> <p>7a: describe applications of robotics, process control, and automation systems</p> <p>7b: apply design concepts to problems in robotics, process control, and automation systems</p> <p>7c: identify fields and career opportunities related to robotics, process control, and automation systems</p> <p>7d: identify emerging trends in robotics, process control, and automation systems</p> <p>10: The student demonstrates a knowledge of drafting by completing a series of drawings that can be published by various media. The student is expected to:</p> <p>10b: store and retrieve geometry</p>	<p>EK.4.1.1G: Knowledge of standard algorithms can help in constructing new algorithms.</p>

Mon, Mar 19 (Day A)	Tue, Mar 20 (Day B)	Wed, Mar 21 (Day A)	Thu, Mar 22 (Day B)	Fri, Mar 23 (Day A)
<p>PRINCIPLES OF APPLIED ENGINEERING - SECTION 2 (2:40 PM - 3:30 PM)</p> <p>Learning Outcomes:</p> <ul style="list-style-type: none"> I will demonstrate my existing knowledge of computer engineering I will demonstrate my research abilities to define key terms related to computer engineering <p>Warm-Up Assignment:</p> <ul style="list-style-type: none"> Login to Computer or Chromebook <p>Review of Prior Knowledge:</p> <ul style="list-style-type: none"> N/A <p>Introduction to New Material: (I Do)</p> <ul style="list-style-type: none"> Intro to Quizlet Flash Cards <p>Guided Practice: (We Do)</p> <ul style="list-style-type: none"> N/A <p>Independent Practice: (You Do)</p> <ul style="list-style-type: none"> Complete Unit 12 Pre-Test http://www.g-wlearning.co 		<p>PRINCIPLES OF APPLIED ENGINEERING - SECTION 2 (2:40 PM - 3:30 PM)</p> <p>Learning Outcomes:</p> <ul style="list-style-type: none"> I will demonstrate my understanding of binary numbers by completing Lab 12-4 <p>Warm-Up Assignment:</p> <ul style="list-style-type: none"> Login to Computer <p>Review of Prior Knowledge:</p> <ul style="list-style-type: none"> Number Bases <p>Introduction to New Material: (I Do)</p> <ul style="list-style-type: none"> Base-2 Numbering System <p>Guided Practice: (We Do)</p> <ul style="list-style-type: none"> Converting Base 10 to Base 2 Converting Base 2 to Base 10 <p>Independent Practice: (You Do)</p> <ul style="list-style-type: none"> Complete Lab 12-4 <p>Graded Items</p> <ul style="list-style-type: none"> Daily Grades (50%) 		<p>PRINCIPLES OF APPLIED ENGINEERING - SECTION 2 (2:40 PM - 3:30 PM)</p> <p>Learning Outcomes:</p> <ul style="list-style-type: none"> I will demonstrate my understanding of computer architecture by completing Lab 12-3 <p>Warm-Up Assignment:</p> <ul style="list-style-type: none"> N/A <p>Review of Prior Knowledge:</p> <ul style="list-style-type: none"> General Computer Parts <p>Introduction to New Material: (I Do)</p> <ul style="list-style-type: none"> Overview of a Desktop Computer <p>Guided Practice: (We Do)</p> <ul style="list-style-type: none"> Block Diagrams <p>Independent Practice: (You Do)</p> <ul style="list-style-type: none"> Complete Lab 12-3 <p>Graded Items</p> <ul style="list-style-type: none"> Daily Grades (50%) <ul style="list-style-type: none"> Lab 12-3

Mon, Mar 19 (Day A)	Tue, Mar 20 (Day B)	Wed, Mar 21 (Day A)	Thu, Mar 22 (Day B)	Fri, Mar 23 (Day A)
<p>m/technologyeducation/2852/ch12/pre.htm</p> <ul style="list-style-type: none"> • Complete Unit 12 Key Terms • Complete Unit 12 Quizlet Activity https://quizlet.com/_418n71 • Unit 12 Homework Textbook Page 259 / Google Drive (Due Friday) <p>Graded Items</p> <ul style="list-style-type: none"> • Daily Grades (50%) <ul style="list-style-type: none"> ◦ Unit 12 Pre-Test ◦ Unit 12 Key Terms ◦ Unit 12 Vocabulary Activity in Quizlet ◦ Unit 12 Math Application (Due Friday) <div data-bbox="121 1049 455 1490" style="border: 1px solid #ccc; padding: 10px; margin-top: 10px;"> <p>Standards/Expectations:</p> <p>1: The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:</p> <p>1a: demonstrate knowledge of how to</p> </div>		<ul style="list-style-type: none"> ◦ Lab 12-4 <div data-bbox="879 331 1218 1476" style="border: 1px solid #ccc; padding: 10px; margin-top: 10px;"> <p>Standards/Expectations:</p> <p>1: The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:</p> <p>1a: demonstrate knowledge of how to dress, speak, and conduct oneself in a manner appropriate for the profession</p> <p>1b: show the ability to cooperate, contribute, and collaborate as a member of a group in an effort to achieve a positive collective outcome</p> <p>2: The student investigates the components of engineering and technology systems. The student is expected to:</p> <p>2d: describe how technological systems</p> </div>		<div data-bbox="1644 207 1982 1425" style="border: 1px solid #ccc; padding: 10px; margin-top: 10px;"> <p>Standards/Expectations:</p> <p>1: The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:</p> <p>1a: demonstrate knowledge of how to dress, speak, and conduct oneself in a manner appropriate for the profession</p> <p>1b: show the ability to cooperate, contribute, and collaborate as a member of a group in an effort to achieve a positive collective outcome</p> <p>2: The student investigates the components of engineering and technology systems. The student is expected to:</p> <p>2d: describe how technological systems interact to achieve common goals</p> </div>

Mon, Mar 19 (Day A)	Tue, Mar 20 (Day B)	Wed, Mar 21 (Day A)	Thu, Mar 22 (Day B)	Fri, Mar 23 (Day A)
<p>dress, speak, and conduct oneself in a manner appropriate for the profession</p> <p>1b: show the ability to cooperate, contribute, and collaborate as a member of a group in an effort to achieve a positive collective outcome</p> <p>2: The student investigates the components of engineering and technology systems. The student is expected to:</p> <p>2d: describe how technological systems interact to achieve common goals</p> <p>2f: conduct and present research on emerging and innovative technology</p> <p>3: The student presents conclusions, research findings, and designs using a variety of media throughout the course. The student is expected to:</p>		<p>interact to achieve common goals</p> <p>2f: conduct and present research on emerging and innovative technology</p> <p>3: The student presents conclusions, research findings, and designs using a variety of media throughout the course. The student is expected to:</p> <p>3a: use clear and concise written, verbal, and visual communication techniques</p> <p>3c: use sketching and computer-aided drafting and design (CADD) to develop and present ideas</p> <p>4: The student uses appropriate tools and demonstrates safe work habits. The student is expected to:</p> <p>4d: dispose of hazardous materials and wastes appropriately</p> <p>7: The student understands the</p>		<p>2f: conduct and present research on emerging and innovative technology</p> <p>3: The student presents conclusions, research findings, and designs using a variety of media throughout the course. The student is expected to:</p> <p>3a: use clear and concise written, verbal, and visual communication techniques</p> <p>3c: use sketching and computer-aided drafting and design (CADD) to develop and present ideas</p> <p>4: The student uses appropriate tools and demonstrates safe work habits. The student is expected to:</p> <p>4d: dispose of hazardous materials and wastes appropriately</p> <p>7: The student understands the opportunities and careers in fields related to robotics, process control,</p>

Mon, Mar 19 (Day A)	Tue, Mar 20 (Day B)	Wed, Mar 21 (Day A)	Thu, Mar 22 (Day B)	Fri, Mar 23 (Day A)
<p>3a: use clear and concise written, verbal, and visual communication techniques</p> <p>3c: use sketching and computer-aided drafting and design (CADD) to develop and present ideas</p> <p>4: The student uses appropriate tools and demonstrates safe work habits. The student is expected to:</p> <p>4d: dispose of hazardous materials and wastes appropriately</p> <p>7: The student understands the opportunities and careers in fields related to robotics, process control, and automation systems. The student is expected to:</p> <p>7a: describe applications of robotics, process control, and automation systems</p> <p>7b: apply design concepts to problems in robotics,</p>		<p>opportunities and careers in fields related to robotics, process control, and automation systems. The student is expected to:</p> <p>7a: describe applications of robotics, process control, and automation systems</p> <p>7b: apply design concepts to problems in robotics, process control, and automation systems</p> <p>7c: identify fields and career opportunities related to robotics, process control, and automation systems</p> <p>7d: identify emerging trends in robotics, process control, and automation systems</p> <p>10: The student demonstrates a knowledge of drafting by completing a series of drawings that can be published by various media. The student is expected to:</p>		<p>and automation systems. The student is expected to:</p> <p>7a: describe applications of robotics, process control, and automation systems</p> <p>7b: apply design concepts to problems in robotics, process control, and automation systems</p> <p>7c: identify fields and career opportunities related to robotics, process control, and automation systems</p> <p>7d: identify emerging trends in robotics, process control, and automation systems</p> <p>10: The student demonstrates a knowledge of drafting by completing a series of drawings that can be published by various media. The student is expected to:</p> <p>10b: store and retrieve geometry</p>

Mon, Mar 19 (Day A)	Tue, Mar 20 (Day B)	Wed, Mar 21 (Day A)	Thu, Mar 22 (Day B)	Fri, Mar 23 (Day A)
<p>process control, and automation systems</p> <p>7c: identify fields and career opportunities related to robotics, process control, and automation systems</p> <p>7d: identify emerging trends in robotics, process control, and automation systems</p> <p>10: The student demonstrates a knowledge of drafting by completing a series of drawings that can be published by various media. The student is expected to:</p> <p>10b: store and retrieve geometry</p>		<p>10b: store and retrieve geometry</p>		