



Intro to Engineering

Course Description:

The Engineering Pathway will allow students the opportunity to participate in project-based learning focused on creativity and problem solving as it relates to a successful career in the engineering industry.

Essential Skills: Upon completion of this course, students will:

- ✓ Build transportable skills such as communication and collaboration.
- ✓ Develop brainstorming techniques and mindset characteristics.
- ✓ Create and format professional presentations.
- ✓ Demonstrate and communicate an understanding of an engineering mindset.
- ✓ Demonstrate problem solving skills.

Attendance: Students are required to be in school every day. Students are responsible for communicating with their teachers to make up for missed learning. Students entering the room after the bell will be marked tardy.

Course Expectations: Although not everything is graded, everything is important. In order to demonstrate growth and learning, students will need to:

1. Participate in class activities (take notes, work in a group, complete in class tasks, ask questions) without distractions (cell phones, games, etc.)
2. Complete all assessments within teacher timelines.
3. Assignments are due on the assigned day which are listed on Canvas.
4. Projects/Assignments need to be submitted to the correct area as instructed by the teacher.

Grading

Learning (Practice): includes instructional activities in and outside of class and are not used in grade determination.

Skyward Assessment (Grades): may include quizzes, labs, learning checks, tests, speeches, performances, activities, projects, and problems. Categories that will be used: Assignments, Daily Grades, Projects, Quizzes and Tests, and Final Exam.

Final Exams: All students are required to take and complete semester finals in accordance with the semester exam schedule.

Final Grade

A	100% - 90%
B	80% - 89%
C	70% - 79%
D	60% - 69%
F	0% - 59%

Calculations:

Final Grade Calculation	
Cumulative Grade	95%
Final Exam(s)	5%

Tests:

Central High School Courses:

- Will determine grades based on student performance and growth.
- Will not include practice and behavior in grade determination.
- Will give all students regardless of absence an opportunity to demonstrate learning.
- Will not include extra credit

Instructional Resources: Students will use Tinkercad, ArcGIS, and Engineering notebooks; along with operating systems, Internet browsers, search engines, and other practical applications of computers throughout the semester.

Cheating/ Academic Dishonesty:

- ✓ Copying and plagiarizing is unprofessional, unethical, and unacceptable.
- ✓ “Borrowing” or plagiarizing of any kind could result in a zero ‘0’ for the entire project/assignment. When using an author’s work, give credit, and cite your sources.
- ✓ Copying someone else’s work could cause both you and the person who permitted you to copy their work to receive a zero (0) for the assignment.

Classroom Procedures & Guidelines:

- Harassment— zero tolerance! (Outlined in the Student Handbook)
- **Electronic Devices/Cell Phones/ Headphones/ Earbuds**
 - Must be powered off and placed in backpacks upon entering the room.
 - **Cell phone usage is not permitted during class time.**
All confiscated phones and ear buds will be turned into Administration and follow the school’s cell phone misuse policy.
- **NO food or drink**—leave food & drink in your lockers. (*school rule & not safe around computers*)
- **Keep all purses, backpacks, & bags**—stored in the back of the room.
- **Computer Usage**—follow Policy from the Student Handbook.
- **Equipment Misuse/Damages**—Any unauthorized handling of equipment, power switches, or supplies is prohibited.
 - *Students may be responsible for replacing or paying for any damaged equipment/materials.*

- **Talking** kept to a minimum so other students can focus on their work—do not disrupt others. Please use appropriate language (no swearing, derogatory comments, etc.)
- **Behavior** Students are expected to use good manners and be respectful and tolerant of all in the class. They are expected to be a positive, contributing member to the class.
- Leave the workstation area free of trash and chairs pushed in.
- **Do not line up at the door**—stay seated at your computer until the bell rings at the end of class.
- Students will abide by all the CHS rules outlined in the handbook.

COMPUTER AND INTERNET GAMES

✓ There will be NO computer or Internet games in the lab.

Supplies: Engineering notebook and pencil.

The teacher reserves the right to alter this syllabus at any time during the course.

Course Calendar/Pacing:

<p style="text-align: center;">August/September</p> <table border="1"> <tr><td></td><td></td><td>22</td><td>23</td><td>24</td><td>1</td><td>2</td></tr> <tr><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> <tr><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td></tr> <tr><td>17</td><td>18</td><td>19</td><td>20</td><td>21</td><td>22</td><td>23</td></tr> <tr><td>24</td><td>25</td><td>26</td><td>27</td><td>28</td><td>29</td><td>30</td></tr> </table>			22	23	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	<p style="text-align: center;">October</p> <table border="1"> <tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td></tr> <tr><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td></tr> <tr><td>15</td><td>16</td><td>17</td><td>18</td><td>19</td><td>20</td><td>21</td></tr> <tr><td>22</td><td>23</td><td>24</td><td>25</td><td>26</td><td>27</td><td>28</td></tr> <tr><td>29</td><td>30</td><td>31</td><td></td><td></td><td></td><td></td></tr> </table>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31					<p style="text-align: center;">November</p> <table border="1"> <tr><td></td><td></td><td></td><td>1</td><td>2</td><td>3</td><td>4</td></tr> <tr><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td></tr> <tr><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td><td>17</td><td>18</td></tr> <tr><td>19</td><td>20</td><td>21</td><td>22</td><td>23</td><td>24</td><td>25</td></tr> <tr><td>26</td><td>27</td><td>28</td><td>29</td><td>30</td><td></td><td></td></tr> </table>				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30		
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Unit 1 & Unit 3	Unit 2 & 4	Unit Problem
	Finals	Professional Development
		Semester Exams