



Golden Eagle Charter School
Technology Learning Targets

General	
1	Make informed choices among technology systems, resources and services.
2	Examine social, ethical and human issues involved with technology.
3	Identify capabilities and limitations of contemporary and emerging technology resources and assess the potential of these systems and services to address personal, lifelong learning, and work place needs.
4	Routinely and efficiently use online information resources and technology tools to meet needs in collaboration, decision-making, research, publications, communications, and productivity.
5	Plan, design, and create web pages.
6	Evaluate technology-based options, including distance and distributed education, for life-long learning.
7	Investigate and apply expert systems, intelligent agents, and simulations in real-world situations.
8	Collaborate with peers and experts to contribute to a content-related knowledge base by using technology to compile, synthesize, produce and disseminate information, models and other research projects.
9	Successfully install computer hardware and software.
10	Use multi media hardware and/or software to create original art, presentations, and/or models.
Engineering	
11	Achieve an advanced level of skill in engineering design by learning how to conceptualize a problem, design and build prototypes or models, test prototypes or models, and make modifications as necessary.
12	Examine the engineering design process. (Process steps are: identify the problem; research the problem; develop possible solutions; select the best possible solution(s); construct prototypes and/or models; test and evaluate; communicate the solutions; and redesign.
13	Produce and analyze multi-view drawings (orthographic projections) and pictorial (isometric, oblique, perspective) drawings using various techniques.
14	Interpret and apply scale and proportion to orthographic projections and pictorial drawings, such as, $\frac{1}{4}'' = 1'0''$, $1 \text{ cm} = 1 \text{ m}$.
15	Interpret plans, diagrams, and working drawings in the construction of prototypes or models.
16	Design, build, test and evaluate (and redesign, if necessary) a prototype or model.
Manufacturing	
17	Describe the manufacturing processes of casting and molding, forming, separating, conditioning, assembling, and finishing.
18	Demonstrate an ability to use the engineering design process to solve a problem or meet a challenge in manufacturing technologies.
19	Describe the advantages of using automated machines in the manufacturing processes. (i.e. increased production, improved quality, and safety)