

CAD (Level 4)

Description – Teams will be asked to create one or more CAD designs/views as solutions to the problem.

Internet Access – Not needed for challenge completion

Helpful tools – 3-D modeling CAD software such as Autodesk Inventor, Solid Works, etc.

Judging – At the end of the contest time, teams should save their work and upload their work to the GCC Google Drive folder, along with any instructions needed for Judges to view.

Criteria – Solutions will be evaluated on accuracy and completeness of the 3-D models along with the proper application of orthographic projection and dimensioning rules.

DESKTOP PRESENTATIONS (Level 2)

Description – Teams will design original slide shows using text and graphics to achieve the project's objectives.

Hardware/Software – Teams may use their choice of software, prepared and original photos, clip art, logos, animations, video and audio clips. Scanners, cameras, mobile devices and online resources can be used. Earphones are recommended but not required. Dictionaries and/or spell check programs may be used.

Internet Access – Can be used for challenge completion.

Helpful tools – Microsoft Office (PowerPoint, etc.), Adobe Creative Suite (Photoshop, Flash, Dreamweaver, etc.), PaintShop Pro, Astound, HyperStudio, etc.

Judging – At the end of the contest time, teams should save their work and upload it to the GCC Google Drive folder along with any added instructions needed for the Judges. The work should be saved to a Microsoft Office Suite format.

Criteria – Solutions must meet the problem's requirements and will be evaluated for achievement of stated objectives.

DESKTOP PUBLISHING (Levels 2 & 4)

Description – Teams will design a publication using their choice of software and clip art.

Hardware/Software – Dictionaries and/or spell check programs may be used. Additional clip art packages, scanners, and digital cameras can be used, but will not be graded any higher than simple clip art.

Internet – Optional to access additional clipart, use web or server-based software, or to download sponsor logos.

Helpful tools – Adobe Creative Suite (Photoshop, Illustrator, Dreamweaver), Microsoft Office (Word, PowerPoint, Publisher), Classroom Publisher, PrintShop, Writing Center, PaintShop, QuickTime, Pages, etc.

Criteria – Solutions will be evaluated on originality, creativity, fulfillment of the problem's requirements, and effective use of the computer.

GRAPHIC DESIGN (Level 4)

Description – Teams will create visual solutions to various problems using their choice of graphics software.

Hardware/Software - Some problems may allow the use of scanners or digital cameras.

Internet – Optional to access web information for background research related to assigned problems, use web or server-based software, or to download sponsor logos.

Helpful tools – Adobe Creative Suite (Illustrator, PhotoShop, InDesign, Dreamweaver, Flash), Microsoft Office (Word, PowerPoint), Painter, Print Shop, Easy Color Paint, Expert Paint, KidPix, PaintBrush, PowerPaint, Morph, SuperPaint, SuperPoint, Deluxe Paint, PaintShop, etc.

Judging – At the end of the contest time, teams should save their work and upload it to the GCC Google Drive folder along with any other information needed for the judges to view work.

Criteria – Solutions will be evaluated on originality, creativity, fulfillment of the problem's requirements, and effective use of the computer.

OBJECT-ORIENTED BUSINESS PROGRAMMING (Level 4)

Description – Teams will solve a selection of programming problems using their choice of Visual Programming or JAVA programming languages.

Hardware/Software – Editors are allowed.

Internet – Not needed for challenge completion

Helpful tools and skills – Visual Studio QBasic, True Basic, MS Basic, Quick Basic, Visual Basic, C++, C#, JCreator for IDE, Java IDE, SunJAVA, HTML, BlueJ, Eclipse, DevCPP, JAVA, etc.

Judging – Judges will evaluate a copy of the program code on the screen as well as the program execution. Each programming language will be judged separately. At the end of the contest time, contestants must let a judge into their breakout Zoom room to view the program run. All programs must be saved to the results folder. Partial solutions will be judged.

Criteria – Solutions will be evaluated on operability, user-friendliness, clarity, organization, structure, utility, creativity, and fulfillment of the problem's requirements. Each problem has a different point value, and the winner is chosen based on the total number of points earned.